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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

NOTTINGHAM GENERAL HOSPITAL.

GASTROTOMY: REMOVAL OF FIBROUS TUMOUR OF UTERUS: DEATH.

By JOHN SLOANE, M.D., House-Surgeon to the Leicester Infirmary, etc.

[*Read before the Leicester Medical Society, February 2nd*, 1858.]

THE notes of the following case I took when I was assistant resident surgeon in the Nottingham General Hospital; and Mr. Eddison at the time kindly gave me permission to publish them.

Eliza Brownlow, aged 33, was admitted into the General Hospital, Nottingham, on October 3rd, 1854, under the care of Mr. Eddison. She works in a lace-warehouse; is unmarried; of healthy parentage and temperate habits. From the age of four to twenty-five years, she was much troubled with strumous disease in the glands of the neck, which is much scarred on both sides. With this exception, she enjoyed good health till 1849, when she began to experience in the left iliac region a severe pain, which would last for about a week, and from which she would probably then be free for about a month. The length of the intermissions has gradually decreased, and now she is released from suffering for only a few days, and the the pain continues for about three weeks. In 1851, Mr. Eddison detected a tumour, which he believed to be ovarian, low down on the left side of the abdomen; it has since gradually increased. In this year, she informs me, she was in the Hospital for Diseases of Women, in Soho Square, London, for six weeks. Her medical attendants there suspected pregnancy, and advised that no very active treatment should be adopted till that point was decided. In 1852, she had an attack of peritonitis, and again in 1853; these attacks yielded under Mr. Eddison's treatment. During the last two years, fluid has been collecting in her abdomen, which has given rise to the usual symptoms. Four days after admission, Mr. Eddison tapped her, and drew off seven pints of serum. This he did in the usual site, by cutting through the parietes as far as the peritoneum with the lancet, and then perforating this membrane with a female catheter, through which the fluid escaped. This operation, as usual, has afforded much relief.

October 11th. She complains of the pain previously described. The appetite is bad; there is some pain after eating or drinking, which generally lasts about half an hour. She has been subject to sickness and vomiting for about the last six months, but has not been sick for the last two days. The bowels are gently relaxed without medicine. On an endeavour being made to ascertain the extent of hepatic dulness, she complained so much that the percussion caused pain, that I was obliged to desist. Some tenderness on pressure existed all over the abdomen, which is enlarged generally. A large solid tumour can be felt, which seems to fill the whole of the lower part of the abdominal cavity. The menses are regular; she has slight leucorrhœa. There is no œdema of any part. Pulse 112; very feeble. The urine is scanty, and has a specific gravity of 1013; in other respects it is normal. The other organs appear to be healthy.

The tumour was believed to be ovarian; and, after two consultations of the surgeons of the Hospital, it was decided to remove it. The patient herself was very anxious to have the operation performed, after she was made acquainted with the dangers she incurred.

Her ward, which contained only two beds, one of which was not occupied, was heated to 70° Fah.; and this degree of temperature was kept up for two days. At 11 A.M., she was removed to an operating-table, placed at her bedside, and, while she was under the influence of chloroform, an incision was made in the mesial line from the umbilicus to the pubes. A considerable quantity of serum escaped, and there was rather profuse hæmorrhage. Some old and firm adhesions between the tumour and the abdominal wall were broken up, and several cysts containing serum in the diseased mass were opened to lessen its size, before it could be extracted. The peduncle, nearly circular, was about one inch and a half in diameter. It was perforated by a needle carrying strong whipcord, which was divided, and the four ends were tightly tied. It was then divided between the ligature and the tumour, close to the latter. The edges of the incision in the abdominal walls were drawn together by interrupted suture; compresses were applied; and pressure was kept up by a very broad flannel bandage. During the progress of the operation, constant pressure was made on the abdomen by an assistant; yet she appeared to be on the very verge of syncope. After being placed in bed, she gradually rallied for some time, but still continued in a very depressed state. Bottles of hot water were applied to her extremities; and some brandy, beef-tea, etc., were cautiously but assiduously administered. She died about 4 o'clock, five hours after the commencement of the operation.

On dissection seventeen hours after death, very little serum was found in the abdomen, and no blood. There was diffused florid redness of the peritoneum anteriorly. This membrane was lacerated extensively in several places, where adhesions had existed; and the fold reflected from the uterus to the rectum was torn. The divided peduncle was attached to the fundus of the uterus. The ovaries were not enlarged; they were corrugated, and the left contained several small cysts. In the left pleura were found about two pints of clear serum, with the left lung floating upon it; there were no pleural adhesions. The tumour, after several cysts near its surface had been punctured, weighed fifty ounces. It was solid and hard. In shape and size, it much resembled an adult human brain.

Mr. Paget, of St. Bartholomew's Hospital, to whom half of the tumour was presented, examined it, and reported upon it as follows:—

"The tumour, of which I have received a portion to-day, appears to be good example of the fibrous tumour of the uterus. It has all the obvious characters of structure belonging to such tumour; and with the microscope one finds in it abundant small smooth muscular fibres and tough fibrous conpective tissue. It includes a certain number of cysts, as if in progress towards the characters of the fibro-cystic tumour. A thin layer of substance is separable from parts of the outer surface of the tumour, which I suppose is the peritoneum, and the outer layer of the wall of the uterus, which it has extended in its growth. Beneath this layer also there appears to have been large spaces, which I presume were cysts."

REMARKS. In connexion with a case of ovarian tumour which came under my notice in the Leicester Infirmary, and which was reported in last week's JOURNAL, this case of fibrous uterine tumour will serve to impress upon us the impossibility in all instances of distinguishing between these two diseases. The similarity between the two cases is increased by the fact that, in the progress of each, before any operation was resorted to, there were vomiting and repeated attacks of peritonitis. The symptoms of fibrous tumours of the uterus, whether attached to the interior or to the exterior surface, are, menorrhagia, which generally is present, especially when the growth occupies the interior of the womb; retention, or a frequent desire to pass urine; and variable sensations of pain in the lower part of the abdomen. The last was the only symptom present in this case; whereas the first mentioned, which is the most important, had not

occurred. When the tumour was first observed, it was situated low down on the left side, indicating an ovarian origin. But fibrous uterine tumours are seldom mesial; so that position does not assist much in forming a diagnosis; neither does the desire and inability to pass urine, as this symptom is also observed in cases of ovarian tumour. Indeed, various sensations of pain in the lower part of the abdomen are frequent concomitants of ovarian tumour; and, in this disease, menorrhagia is by no means very rare; so that every symptom of uterine fibrous outgrowth may be observed in cases of ovarian tumour; and the converse. According to the observations of Dr. West and Mr. Lee, in more than one-third of the cases, fibrous tumours are situated on the posterior wall of the uterus, causing more or less displacement of the os backwards; and, when the tumour is situated on the anterior wall, the os is of course displaced in the contrary direction; but in this instance, as the growth was attached to the fundus, the uterus occupied its usual position. The slow growth of the tumour certainly indicated a uterine origin; but it appears to me that the bulk of the evidence most accorded with the view that it was ovarian. Immediately before proceeding to perform ovariotomy in cases where a doubt exists as to the nature of the growth, it would be advisable to make a small incision through the abdominal walls, in order to ascertain the colour of the tumour; as, if it be bluish white, it is ovarian; whereas, if it be red, it is probably uterine. If a correct diagnosis had been formed in this case, I do not believe that the operation would have been resorted to; inasmuch as, in the few cases on record in which fibrous outgrowths of the uterus have been removed by gastrotomy, all, except one reported by Atlee, an American, have ended fatally. Besides, these tumours do not tend, as a rule, rapidly to destroy life; and this patient was not exposed to two of the causes which induce a fatal result in this disease. Not being married, she was not likely to become pregnant; and she did not suffer from menorrhagia; but, from the occurrence of ascites, it is not probable that she would have survived long.

If the tumour had been ovarian, was ovariotomy advisable in this case? The profession is divided into two parties on this question. One party holds that the operation is so very frequently fatal, that it is never justifiable; the other contends that, in properly selected cases, the operation is not only justifiable, but advisable. In my humble opinion, the position of the latter is best supported by facts. Dr. Clay of Manchester, who has had greater experience in this operation than any other man, last summer had performed it in seventy-nine cases, fifty-five of which had been successful; but he believes that, with his increased experience, he will not in future lose more than 25 per cent. He has operated on patients as young as twelve, and as old as fifty-eight years; but he would not operate in a patient beyond fifty-eight. He seldom has removed a tumour weighing less than twenty-five pounds; and he has removed as much as seventy-three pounds at one time; but tumours, varying from thirty-five to forty pounds in weight, have been the most common. He prefers a case without adhesions; but he thinks lightly of them, and does not hesitate to operate in cases otherwise favourable. Where they exist, when the adhesions are recent, he detaches them; if firm, he cuts the band near to the tumour, leaving a portion attached to the peritoneal surface. He has often, however, cut away large portions of the peritoneum without bad results; and he does not fear to sponge out the abdominal cavity. He invariably adopts the large incision. According to his statements, most cases of ovarian tumour will be suitable for this operation. The only objection he mentions is, the patient being above fifty-eight years of age; but I presume he would not operate where the patient was very feeble, or suffered from a formidable disease in some other organ. He states that ovarian tumours "seldom exceed two years without completing their termination some way"; but I have myself met with cases, in which large tumours of the ovary had existed for a long series of years, and were a source of annoyance, chiefly from their weight, and the effects of pressure. Some, I know, run a very rapid course; and, according to Professor Simpson, they may even lead to a fatal result within a year. Cazeaux states that their duration is variable, the average being about four years; whereas Velpeau believes the average to be six, ten, or twelve years; and, according to Huguier, the younger the patient, the more speedily does she sink under the disease. It appears to me that, in an affection in which the natural tendency to recovery is so very slight, and in which the progress to a fatal result is so certain, and in some cases so rapid, we should be culpable unless we resorted to the means available to science to control or to cure the disease. Ovariotomy is the only remedial measure to which we can resort, with the hope of success, in the cases of multilocular tumour, which are much the most common. But some surgeons under no circumstances will perform this operation. Velpeau states "that extirpation of the ovaries is a fearful operation, and ought to be proscribed, even were the cases which have been announced real." This opinion, I have reason to know, is extensively held by surgeons in our own country. I was told last year by Mr. Hutchinson, of the Metropolitan Free Hospital, that, in three years, reports of about a dozen cases of ovariotomy performed by hospital surgeons had been sent to him; and they every one had ended fatally. Moreover, as far as he knew, the details of not more than one or two of these cases had been published. Dr. Clay's success is extraordinary, and is not approached, I believe, by that of any other practitioner. His plan of operating, and the treatment he adopts subsequently, have been published; and, if carefully followed by other surgeons, one can see no good reason why the results, in other hands, should be so very unfavourable, compared to his.

Tapping is, at the best, only a palliative measure, and is, as you all know, generally had recourse to when urgent dyspnœa is caused by the large mass in the abdomen. It affords information respecting the nature of the tumour, whether it is unilocular or otherwise. If believed to be unilocular after the tapping, the cyst may be dragged through a small incision in the abdominal parietes, and a ligature placed on the pedicle. For this less formidable mode of extirpating an ovarian tumour to prove successful, it is essential that the cyst should be unilocular, which is rare; and that there should be no adhesions, which, according to Clay, is still more rare. In unilocular ovarian tumours, where adhesions do exist after tapping, we may inject the sac with tincture of iodine. This plan of treatment has been employed of late a good deal in this country, and by none, I believe, more frequently than by Professor Simpson. He has adopted this treatment, he states, in twenty or thirty cases; sometimes with complete success, the sac not again becoming filled, and the patient remaining well and strong; in other cases, the tumour continues present, but has not increased to any great size. In some of the patients, the largest cyst in a multilocular tumour had become obliterated, but the smaller cysts had continued to enlarge; in others, the treatment had failed, inasmuch as the cyst had again filled. In one case only had death resulted; and he attributed the death in this instance rather to the paracentesis than to the injection. The iodine injection, in his hands, has been seldom attended with much pain, or with very severe local or constitutional irritation; but, in the practice of others, the injection has been sometimes followed by unconsciousness which has lasted as many as fifteen hours, and by vomiting which has continued for several days; yet, notwithstanding these grave symptoms, the patients have afterwards done well. A few cases are recorded in which death followed the operation, but in most of these the cavity of the abdomen had received the injection, instead of the ovarian cyst. To prevent the risk of this serious mishap, Mr. Hutchinson recommends a flexible catheter to be passed to pretty nearly its whole length through the canula into the sac before more than half the fluid has escaped, and that the iodine should be injected through the catheter after all the fluid has drained off.

Rather more than a year ago, the treatment of these tumours underwent a lengthened discussion at the Academy of Medicine in France, and the following are some of the propositions deduced from the statements of the speakers by M. Saurel:—

"The proceeding to which it is advisable, in almost every case of ovarian cyst, to have recourse, is puncture, followed by iodureted injection, with occlusion of the opening.

"Unilocular cysts, without organic alterations of their walls, containing a serous or sero-sanguinolent or albuminous fluid, cysts which have originated in an extra-uterine pregnancy, and purulent cysts, are most amenable to treatment.

"The proper time to operate is when the cyst, not having yet acquired a large size, is beginning to cause suffering to the patient, or to exercise an injurious reaction upon the functions."

The only form of ovarian tumour which undergoes, and that very rarely, a spontaneous cure, is that composed of a single cyst. This sometimes ruptures, and discharges itself into the peritoneum, or into some viscus with an external outlet. The fluid in the cyst has sometimes become absorbed, and the cavity obliterated.

KING'S COLLEGE HOSPITAL.

THE USE OF PLASTER OF PARIS IN FRACTURES.

By P. W. Swain, Esq., House-Surgeon.

The use of plaster of Paris bandages in certain fractures of the upper and lower extremities has of late become so frequent at this Hospital, and has been attended with so much success, that perhaps a few remarks explanatory of its application, together with the record of some cases illustrative of its use, may not be unacceptable.

The usual manner in which a plaster of Paris bandage is applied is as follows:—An ordinary roller of unbleached calico is thoroughly saturated with *cold* water; about two pints of cold water are then poured into a basin, and to it is added, by handfuls, the finest ground plaster of Paris (the mixture being the while constantly stirred round with the hand), until a paste somewhat thicker than cream is obtained. The end of the wet roller is then placed in this mixture; and being gradually unrolled by an assistant, is re-rolled under the plaster of Paris, in such a manner, that the whole bandage passes through the paste and becomes saturated with it. The injured limb is then placed in proper position, and the roller is passed *rapidly* round it, twice or thrice doubled, some of the paste being smeared over the surface of the bandage between each layer. The outer surface is then smoothed over with a spatula, and the whole is left to "set", which process is accomplished in from twenty minutes to half an hour. During the process of setting the limb must of course be retained in position, by sandbags or some other convenient method. After the bandage has set, its surface is painted over with white of egg, which prevents the plaster of Paris from cracking or crumbling off. The great point to be attended to in applying this bandage is to do it with the greatest rapidity; for, unless this is attended to, the plaster sets before it is applied, and the bandage becomes useless. Another point to be observed is that the bandage must be applied with tolerable firmness, as we find that, unlike the starch or dextrine bandage, which must be put on very lightly to allow for shrinking, this has a tendency rather to expand and make a loose and useless case for the limb.

The advantages attached to this form of bandage appear to be many:

First. Its simplicity, and the celerity with which it may be applied. With plaster of Paris at hand, as it now always is in the wards of our hopitals, a fracture may be permanently put up, within ten minutes after admission, before the swelling otherwise consequent on the injury can supervene.

Secondly. The quickness with which the plaster sets renders its application to *recent* fractures admissible, as it avoids the necessity of keeping the patient long in a constrained position, and the risk of the ends of the bones being put out of place by any untoward movement.

Thirdly. The eventual cure of the fracture is much hastened by getting the patient out of bed on the day after admission, and allowing him to leave the hospital in perhaps less than a week, both which results are obtainable by the use of this bandage.

Lastly. The cleanliness of its application and its after appearance are not the least of its recommendations. Its use was first introduced into our hospital by the late house-surgeon, Mr. Heath, who saw it applied by M. Maisonneuve, the surgeon to La Pitié in Paris.

The following are some of the cases in which this bandage has been used:

Case I. *Fracture of the Tibia.* Thomas S——, aged 8, was admitted under the care of Mr. Partridge on June 21st, 1857, with transverse fracture of the left tibia, caused by a fall from a ladder. On admission, there was no displacement, a little swelling, and much discolouration about the parts. An evaporating lotion was ordered; and on June 23rd, all swelling having subsided, a plaster of Paris bandage was applied. After its application the patient suffered no pain or inconvenience, and was discharged on July 4th. Three weeks afterwards he presented himself at the hospital, when the bandage was removed, and perfect union found to have taken place.

Case II. *Fracture of the Fibula.* John E— was admitted under Mr. Bowman's care, on July 2nd, with fracture of the left fibula, three inches above the malleolus. The accident was caused by his slipping off some palings up which he was climbing. The limb was much bruised and swollen, and evaporating lotions were therefore applied. On July 6th, the swelling having subsided, the leg was put up in plaster of Paris, and the patient allowed to get up from bed and move about the ward with a crutch. On July 15th, he was discharged; and three weeks after, the bandage was removed and the bone found to be united. He suffered no pain whilst wearing the bandage.

Case III. *Fracture of the Malleolus.* Margaret A—, aged 56, was admitted under Mr. Bowman's care, on July 31, with fracture of the left external malleolus. The accident happened by her slipping down some stairs. The ankle was much swollen and very painful. Fomentations were kept on until August 3rd, when the swelling having nearly all gone, a plaster of Paris bandage was applied. On August 8th, the remaining swelling having gone down, the case became loose. It was then slit up, the front and the cut edges pared and brought together with a bandage. On August 15th, she was discharged able to walk pretty well with a stick.

Case IV. *Fracture of the Tibia.* William S—, aged 42, was admitted under Mr. Bowman, on October 16th, with fracture of the tibia and fibula, about an inch above the malleoli. There was no displacement or swelling. The accident was caused by some old stairs giving way with him. The fracture was put up immediately on admission in plaster of Paris. He was able, two days after, to move about the wards, complained of no pain or inconvenience, and was discharged on October 31st. About a month after his discharge, the bandage was removed, and the fracture found to be completely united.

Case V. *Fracture of the Fibula.* John L—, aged 34, was admitted under Mr. Fergusson, on February 2nd, with fracture of the left fibula, about the middle of the lower third. The accident was caused by his slipping off the curb-stone. On admission, there was no swelling, and very little displacement. The limb was immediately placed in a plaster of Paris bandage. On the next day, he was enabled to walk about the ward with a crutch, and complained of no pain. On February 13th, he was discharged. On February 20th, he presented himself at the Hospital, having come some distance with the aid of his crutch. The bandage was entire, and the patient had suffered no pain.

Case VI. *Fracture of the Humerus.* Mary S—, aged 42, was admitted February 5th, 1858, under Mr. Bowman, with a fracture of the left humerus, at the junction of the middle and lower third. The accident was caused by her being knocked down by a cab. There was no swelling about the parts. The arm was bandaged from the hand to the elbow. The limb was then semiflexed, and a plaster of Paris bandage was applied, extending from just below the elbow to the axilla. The arm was retained in position with a bandage until the plaster set. She experienced no pain, and the arm appeared in good position. On the 10th, she was made an out-patient. She has since presented herself on two or three occasions. The bandage remains intact, and she complains of no pain.

These cases have been selected out of a great number that have occurred in the Hospital, as illustrative of the use of plaster of Paris in fractures. Fractures of the fibula seem to be those in which its use is most frequent; but, as the above cases show, any simple fracture where there is not much displacement may be treated in a similar manner.

ST. BARTHOLOMEW'S HOSPITAL.

AMPUTATION FOR ABSCESS IN THE HEAD OF THE TIBIA.

Under the care of W. Lawrence, Esq.

[*From Notes by* Newton Lee, Esq., *House-Surgeon.*]

Edward Porter, aged 45, was admitted July 23rd, 1857, on account of a supposed abscess in the head of the tibia. He said that, about three weeks after Christmas 1856, he felt a tenderness in the head of the right tibia, on its outer side, close to the head of the fibula, which made him limp in walking, and gave him great pain if it was touched. He did not, however, do more for it than give it such rest as the press of business about that time would permit. About the end of the following May, he went to a metropolitan hospital as an out-patient, where he was twice blistered, each time with temporary relief.

On July 23rd, he slipped down, with the leg bent under him, which gave him intense pain; and he went to some hospital, where he was ordered to have his leg bandaged. Not being satisfied with this treatment, he applied at this Hospital, and was admitted. By this time the knee had become considerably

swollen, and very painful. He was ordered to have on twelve leeches, and a linseed poultice afterwards; and to take three grains of iodide of potassium thrice daily. After a few days, the dose of the iodide was increased to five grains thrice daily. The same treatment was continued until the end of August, when he attended as an out-patient; but he still took the iodide of potassium.

September 25th. He was again admitted into the Hospital, in consequence of its being thought that there was thickening of the periosteum. He continued the iodide of potassium, and had on several blisters, each of which gave him temporary relief.

November 8th. It was intended to-day that an incision should be made down to the head of the bone, and the seat of the disease explored; but some family affliction caused him to leave the Hospital.

December 1st. He returned to the Hospital to-day; but, on his way, he fell down and sprained the knee, so that, on admission, it was so painful and swollen that he was ordered to have on eighteen leeches, and twelve more afterwards, if not relieved, which were also applied. Some few days after, he had on twelve more leeches, followed by linseed-meal poultices. He then had a blister applied.

December 20th. He was put under chloroform in the operating theatre, when Mr. Lawrence made a semicircular incision from the upper and outer margin of the tibia downwards and inwards to below the tubercle, and dissected back the flap, when a soft springy surface, of about the size of a crown-piece, was laid open. There had been a slightly fluctuating spot, of small extent, just in this situation, which had led to the supposition that there was an abscess in the head of the bone. Mr. Lawrence then cut through the periosteum freely, and discovered a thick substance of putty-like consistence, occupying nearly the entire head of the tibia. In fact, all the head of the bone had disappeared, with the exception of a shell; and this soft pultaceous matter had taken its place. The cavity extended upwards as far as the cartilage of the knee-joint; and it was deemed expedient by Mr. Lawrence, and the others of the surgical staff of the Hospital then present, to amputate the limb above the joint at once, lest the disease might spread into the joint, and the patient's life be sacrificed through a too zealous attempt to save the limb. This was accordingly done by the flap operation; and, the vessels having been secured by ligatures, and the wound closed by a strip of plaster, the patient was removed to bed.

On recovering from the effects of the chloroform, the patient was found to be losing blood from the wound, which was laid open, and a small artery secured; and, all hæmorrhage having ceased, the edges of the wound were brought together by several sutures, and a piece of wet lint applied. A longitudinal section of the bone was made immediately after the operation, which displayed such an amount of disease as, in the opinion of those present, fully to justify the proceedings that had been taken.

The soft putty-like substance presented, under the microscope, an appearance similar to that which Pott speaks of as "degenerated blood-cells, mixed with broken-down tissue". The cavity was of very large size, so that it might contain a small apple; it had entirely consumed all the cancellous tissue of the head of the tibia, and penetrated so far upwards that only a very thin shell remained, separating it from the knee-joint. The cartilages of the latter could be plainly felt, at the time of the operation, through the upper wall of the abscess. There was, however, no trace of inflammation of the joint. The man is progressing favourably, as far as the amputation is concerned.

Remarks. We have brought forward the preceding case as illustrating an enforced departure from what is justly held to be the rule in treating abscess of the head of the tibia; viz., not to amputate till the effect of trephining has been tried. In the instance before us, although the knee-joint had not yet actually yielded to the slow advance of the chronic abscess, there could be no reasonable doubt that it would at once participate in the more acute inflammation which would be necessary to fill up its cavity after it had been opened. It would, therefore, have been unjustifiable to submit the patient to a risk which might, and very probably would, have involved fatal consequences. It is useful to note such cases as these, which, without marking any retrogression in the art of surgery, show that there are limits beyond which the more prudent of its professors do not care to push their attempts at conservative surgery.

ST. GEORGE'S HOSPITAL.

PHTHISIS AND DISEASE OF THE LIVER OCCURRING IN AN OPIUM-EATER: WITH REMARKS.

By G. Goddard Rogers, M.D., Medical Registrar.

C. W., aged 52, came into the Hospital as Dr. Fuller's patient, on February 10th. He was formerly in a very good position in life, but had got through his money; and after drinking to excess, had indulged largely in opium. Of late his occupation had been that of a stableman at Anderson's. Nothing more was learned as to his antecedents.

Three weeks before admission, he became weak, and lost to a great extent the power of standing. It was also said that he had passed blood a few days previous, but whether by the rectum or by the urethra, was not clearly made out. His tongue was clean; pulse 110, but regular; urine free from albumen; bowel secretions tolerably healthy. At times he was quite violent; and soon after being placed in bed, he got out repeatedly, but sank down after making an effort to proceed further. A morphia draught was given each night; and three times a day he took ammonia with bark and chloric ether. His manner at times was excessively genial and hilarious, and he lay for the most part on his back with a smile on his countenance; greeting those who approached him with expressions more familiar than polite.

On February 4th, his depressed state was much more apparent. The bladder was relieved by the catheter; warmth was applied to the abdomen; and brandy, sulphuric ether, etc., were given to sustain the powers of life: but he gradually sank, as though completely worn out by his previous irregular life, and expired early on February 17th.

The autopsy was made twenty-six hours afterwards.

The brain was very wet, and there was much subarachnoid fluid, but no excess of fluid in the ventricles. The central structures of this organ were quite healthy.

There was a small deposit of atheroma on the mitral valve and at the commencement of the aorta. With this exception, the heart was healthy. Both lungs were congested. At the base of the upper lobe of the right one was a vomica of about the size of a hen's egg, of ragged irregular form, and filled with pus. The lower part of the lung contained miliary tubercle. The liver was very large, of a light yellow colour, and extremely firm consistence. Its capsule was not thickened. On breaking a portion of it, it was found to be granular, and the separate acini seemed very clearly divided from each other. The microscope showed a large quantity of fat, both as free oil and contained in the hepatic cells. There was also a small amount of fibrous tissue.

The kidneys were coarse in texture, but the capsules peeled off readily. The spleen was healthy.

Remarks. The history of this case is by no means so perfect as one could wish; nevertheless, it presents one or two salient points of interest. It does not appear that the patient indulged in opium until after he had become reduced in circumstances, when it is highly probable that the drug told far more rapidly on his constitution than it would have at an earlier period.

Smith, in his *History of China*, as quoted by Dr. A. T. Thomson, says distinctly that the more opulent natives suffer but little from smoking or eating opium; whilst to those who live in poverty it is most destructive.

In a former number of this Journal, we had occasion to make a few remarks on the latent form which phthisis will from time to time assume. Often there is no apparent reason why so formidable a disease should give no sign of its progress; and this case perhaps is as difficult to account for as any: but the continued sedative influence of large quantities of opium might have something to do with hindering any manifestation of disease by cough and expectoration. And as to the first setting up of the pulmonary affection, the man's intemperate habits might originally have caused such hepatic congestion as materially interfered with the decarbonising office of the gland, thus giving increased work to the lungs. Then, as opium was habitually taken, imperfect respiration was induced, and partially decarbonised blood found its way into the systemic circulation. Thus the lung-tissue itself was badly nourished, whilst the respiratory organs were called upon for more energetic action, owing to the liver becoming more and more diseased. And who will, under these circumstances, deny that the very slightest tendency to scrofula would be rapidly aroused, and that speedy disorganisation of the lung from tubercular deposit would follow? Probably, the dis-

charge said to have occurred before admission was melæna of a purely passive character. Had the man then been under medical care, this symptom might have thrown much light on the case, and rendered an accurate diagnosis easy.

Original Communications.

THE METEOROLOGY OF 1856 AND 1857.

By J. A. Hingeston, Esq., Brighton.

[*Continued from page* 87.]

In each year in which the cholera has broken out in this country, the barometer has invariably stood at 30 inches, a little more or less, throughout the whole period of its continuance. This was the case in 1832. My attention was drawn to the circumstance from observing a high barometer with a cloudy sky, although I was not aware of the eventual importance of the observation I was then making. In 1853 this was remarkably the case: the disease was at its worst when the barometer was at 30 inches, and it declined in exact proportion as the mercury sank to 29·500 inches, or thereabouts. I published an account of it in the Association Medical Journal, No. xliii, October 21st, 1853. It was again the very same in 1854, according to a series of very careful observations that I made in that year, as well as from all that I could gather from the observations of others published on this interesting point. At p. 33 of the *Registrar-General's Returns* for the quarter ending September 30th, 1854, it will be seen that, at forty-seven stations in England, Wales, Jersey, and the Isle of Man, where authentic observations were taken, the barometer stood at 30 inches, a little above or below, but chiefly at 30 inches, during September, when the disease was at its worst; and that subsequently, when the disease was declining, the returns from the same localities for the quarter ending December 31st, 1854, showed the barometer at a mean elevation of 29·740 inches, and occasionally as low as 29·600 inches. But last year, 1857, which was so remarkable for its salubrity, the barometer oscillated between 28·500 inches and 30·578 inches—a difference of two inches or more, as may be seen by referring to the *Registrar-General's Returns* for the three first quarters of that year, giving the observations taken at the same places as those already quoted for 1854. My own observations agree entirely with these returns. In the Association Medical Journal, No. cxlviii, October 18th, 1856, I published an account of the barometer for that year, when cholera was absent, in comparison with that for 1854, when cholera was present; and the contrast was as striking as it was complete and conclusive. It showed the barometer obstinately at 30 inches in the year of the cholera, and oscillating considerably above or below it when the disease was absent or declining.

As to the electricity of healthy and unhealthy years, the results are less satisfactory, because the subject, in a medical point of view, is a recent, if not a new one; and yet my observations, such as they are, supply data by no means insignificant, and which, when coupled with those of the Astronomer-Royal at Greenwich, published in the *Registrar-General's Weekly Returns*, furnish matter of no small value and interest. Thus, during the cholera of 1853, the terrestrial and atmospheric electricity was generally considered negative; while, during the cholera of 1854, it was reported positive, but weak. In 1832, I had not thought of connecting electricity with pathology, nor am I aware of any published records on this subject of that date; but, judging from the kind of sky which prevailed, the stillness of the air, and the debility that characterised disease at that time, I should, on comparing it with what I now know of the question, have no doubt in regarding it as negative, weak, or *nil*. My opinion is problematical, and open to correction by those fortunate enough to possess any authentic remains on this point, and which would be most acceptable were they recovered and brought to light. In 1854, my private observations led me to conclude that the electricity was negative, certainly weak, and frequently inert. In 1853, when the cholera was so severe at Newcastle, in the month of September, the prevailing electricity was negative.

We do not yet know the precise meaning of *positive* and *negative*, as applied to electricity. They are conventional terms used to express opposite scientific relations, but not significant of any acknowledged quality or state. Neither is it possible to designate either the one or the other with the same exactness as we describe an algebraic quantity, a mathematical axiom, or a medical fact. We rather imply conditions, the extent and nature of which are indefinite. This ambiguity is unavoidable, but not irremediable. The subject is still *sub judice;* and an approximation to the truth is preferable to no knowledge of it. To me it appears all but incontestable, that what is called negative electricity goes with diseases called asthenic, while the positive belongs to such as are sthenic or inflammatory. Negative electricity is coincident with mild and moist weather; the positive with the cold and frosty, or the hot and dry. In the summer, the electricity is considerably less energetic than in the winter; but then, in the former season, its energy is restored by lightning or gales of wind. In 1857, when the temperature was high and dry, the electricity was for the same space of time (270 days) positive and generally active, with strong tension; and the negative was limited to a very small number of days. (See the Astronomer-Royal's observations in the *Registrar-General's Weekly Returns* for 1857.) Now, that year was a singularly healthy one. More extended inquiries may show many of these notions to be erroneous or nugatory; and, on some future day, electricity itself may stand on a new and firmer basis. My mind is open to conviction, and I am ready to consider the question in all its bearings.

Be this as it may, the kind of electricity is certainly connected with the amount of daylight. There is less light on those days on which the negative electricity prevails, than on the bright, when the electricity is, with few exceptions, positive. In cholera periods, the light is diminished. I have already described this kind of atmosphere in the Association Medical Journal, No. clxxxvii, August 2nd, 1856. Of the two years 1856 and 1857, the latter, though much fairer than the former, was darker by one-eighth. This diminished daylight was owing to the greater amount of clear blue sky in 1857; for blue sky gives back no reflected light. Large white-headed clouds were numerous, and there was a good deal of snow, in the winter of 1856, both of which increased the reflected light greatly. But reflected light contains polarised rays, which are reasonably supposed to be less favourable to health and life than the direct solar beam; and the insalubrity of the moon's ray is thus accounted for. The year 1857, although somewhat darker than 1856, was illumined by the direct solar beam, which may help in accounting for its greater salubrity.

The returns of health are seldom favourable when the sky is grey, the air moist, the daylight diminished, and the electricity negative. The cholera atmosphere is a case in point. On the contrary, the public health is good when the season is open, the clouds distributed in masses, the moisture condensed into showers, and the electricity positive. A large amount of solar beam is as essential to the human as it is to the vegetable creation: hence the insalubrity of cities enveloped in smoke, the northern aspect of dwelling houses, barracks, and hospitals: and the short lives of miners, clerks, and artisans, shut out from the daylight at noon.

By a small contrivance, an account of which was published in the Association Medical Journal, No. cli, November 23rd, 1855, I have been able to measure and record the amount of daylight for the last two years and upwards. I regret that I had not found out the means of doing so twenty-five years ago. I find that February is the darkest month in the year, and August the brightest; the last six months are brighter by one-fourth than the first six, the atmosphere seeming to have acquired a luminosity of its own, which it does not lose till the end of January. If carefully prosecuted, it is an inquiry intimately associated with health and longevity; and it would be most interesting, were it applied to town and country, high and low situations, sea and land, northern and southern latitudes.

The years following an outbreak of cholera have been hitherto marked by an increase of human life, shown by the returns of a diminished rate of mortality. This phenomenon has been prominently exhibited in the last three years, succeeding to 1854. It has been variously accounted for. The epidemic was supposed to have carried off the sickly, and left only the strong; but this is contrary to the fact, for it was the mature and strong that were the most obnoxious to the disease. Others have surmised that cholera occupied the place of other diseases; and that, when it had attacked and carried off its particular victims, it left a healthy population behind. This is so far true, as that, in 1853, the rate of mortality from the ordinary causes was one-fifth below the average. Again, it has been conjectured that the better habits of hygiene adopted by the public, impressed with a dread of infection, tended to im-

prove the general health; but can this improved moral and hygienic discipline be shown and vouched for? In 1855 and 1856, the natural increase of the population was ascribed to the return of the army and navy from the seats of war; but this infusion of fresh life does not serve to account for the singular absence of fatal disease throughout the rest of the population. It is evident that the phenomenon remains to be explained upon principles of which we are not yet cognisant. During the past year, the number of persons who have died at a very advanced age is some proof, as far as it goes, of the old being able to survive the deleterious influences of a prevailing epidemic and a malarious atmosphere conjoined. Of more than 200 nonagenarians recorded in the *Registrar-General's Weekly Returns* for 1857, a large proportion is stated to have been living not only in unhealthy localities, but among the lower classes of society. Of 123 women, the greater number were widows. Thirty-five only were men, of whom a scanty few are designated as *gentlemen*. Seven had reached the verge of 100 and upwards. This return of extreme old age is only for one year, but it is sufficient to show that the old escape the pest as well as many of the young. How, then, shall we account for the extraordinary phenomenon of the increase of life, if not of longevity, after an outbreak of cholera? The answer to the question involves the consideration of a wide range of circumstances, pathological, social, and atmospheric; and the results of experience extended over a large portion of the globe, and continued uninterruptedly for a great length of time, are requisite for arriving at a definite conclusion.

ON DISEASES OF JOINTS.

By Holmes Coote, Esq., F.R.C.S., Assistant-Surgeon to St. Bartholomew's Hospital, and to the Royal Orthopædic Hospital, etc.

IV. LATERAL CURVATURE OF THE SPINE.

[*Continued from page* 145.]

The body of a newly born infant was brought to me by Mr. Dunn for examination, as presenting a singular combination of abnormities. There were noticed:—

1. Deficiency of the cranial bones posteriorly, and the presence of a large bag containing fluid communicating with the interior of the skull.
2. Hare-lip.
3. Fissured palate.
4. Congenital deficiency of the abdominal parietes, so that they burst during birth.
5. Talipes varus of both feet.
6. Double lateral curvature of the spine.

From numbers 1 to 4, we have illustrations of arrest of development. The fœtal layers, which curve forward to complete the cavities of the body by uniting in the mesial line, had here performed their work ineffectually; development had been arrested while there were two separated halves of the body. Hence the open fontanelles; the hare-lip; the fissured palate; the thinned abdominal walls. We see the same in the fissured sternum; in epi- and hypo-spadias; and in the permanent and normal openings of the nares, mouth, vagina, urethra, or anus.

In 5 and 6, we have instances of intrauterine deformities, caused by long continued pressure of the uterine parietes upon the growing fœtus. The inward-turned feet cannot execute those movements, by which the first approach to the normal direction is attained. The muscles, ready formed to contract, are impeded; and the club-foot becomes permanent. The elongating spine has no space for its increasing growth. It becomes compressed, and curves laterally; *i. e.*, in that direction where it meets with least resistance. If the compression be slight, the curve is single, and extends in one sweep from the upper dorsal region to the pelvis. If it be severe, the curve is double, convex in one direction, and concave in another.

Do these deformities, depending upon compression, ensue from accidental deficiency of the liquor amnii, or from natural defect in the uterus, by which its power of expansion is limited? I should be inclined to doubt whether accident ever produced intrauterine errors. But yet others of great experience have stated that congenital deformities may occur in one child only in a family; the others being perfectly well formed. I confess that at present I have not data sufficient to answer the question.

In this communication, I wish to confine my remark to "lateral curvature". The fœtus was carefully dissected, in order that we might see why it was that the spine was twisted.

First, the vertebræ and the muscles, which acted upon them, presented no abnormity. The erectores spinæ, those assemblages of muscles which lie on each side of the spinous processes, were complete in every part, and equally developed, whether on the convexity or the concavity of the vertebral column. They were formed ready to execute their allotted function; but it was obvious that the deviations of the spine from the straight line had so displaced their insertions, as entirely to alter their sphere of action. The action of the sacro-lumbalis and the longissimus dorsi on the side of the concavity would have been, if any, to increase the curve. The same muscles spread over the convexity would twist or rotate some vertebræ, but in greater part would wither or become atrophied. I particularly desired to witness the effect upon the curve of the consecutive detachment of each muscular slip from its insertion, and accordingly cut through the tendons of both the principal muscles (namely, sacro-lumbalis and longissimus dorsi) first on the right and then on the left side, pressing and examining the curve at each instant, in order that I might detect the moment when resistance of any sort or kind was overcome. No effect ensued. The curve was as resistant as ever.

It may be as well to remark that owing to a stupid error, long since corrected by Professor Owen and others who have followed in the course of homological anatomy, but hitherto continued in the schools, the anatomy of the muscles of the back is inaccurate, and rendered so incomprehensible, that it is quite the fashion to profess ignorance of the subject. These muscles, however, are simple to a degree, and extend from homologous points of bone from the pelvis to the head. In the same manner as the interspinales reach from spine to spine, so do muscular and tendinous slips composing the longissimus dorsi pass from diapophysis to diapophysis (*i. e.*, the tubercle of the lumbar region; the transverse process of the dorsal; and a rough spot near the articulating surfaces in the cervical region) and those of the sacro-lumbalis from one rib to another.

We may conclude, therefore, that these muscles, the great extensors of the spine, have nothing to do with the production of lateral curvature; when the spine bends, they lose their proper relations, and cannot execute their functions. In old standing cases, which I have examined in the dissecting rooms, I have found the muscles on the convexity elongated, attenuated, and wasted; those on the concavity wasted also, but tense from secondary or *adaptive* contractions. But cut them through in every way, and the skoliosis, or lateral curvature, remains unaltered. No wonder that surgeons, who have been taught to believe in the "cure of a crooked back by the healthy exercise of its muscles," should be doomed to disappointment: that the practice of putting weights on the head of one, whose spine is already too weak to support the natural burden, should aggravate instead of alleviate the evil. "When I first became engaged," observed Sir Benjamin Brodie, in a lecture delivered at St. George's Hospital, 1846, "in a considerable private practice, and cases of curvature of the spine were presented to my observation, I was in doubt as to their nature and treatment; in this respect my education had been imperfect, and I had learnt nothing of them from my teachers."

What is it, then, which holds the spinal column thus curved, if the bones are primarily unaltered in shape, and the muscles are not concerned in the deformity? Unquestionably the spine yields to the superincumbent weight through weakness of the ligaments; these structures yield and contract, as we know ligamentous structures can contract, along the concavity. It is not one but every ligament which contributes to this end; those between the transverse processes; the fibrous capsules of the articulating processes; the corresponding part of the anterior and posterior common ligaments; moreover, there exists a general adaptation of surrounding parts. The yielding of these ligaments, easy and comparatively painless in a growing girl, is attended with extreme suffering in the adult, as was shown by the case of the late Gideon Mantell, the *post mortem* examination of whose body has been most accurately given in the thirty-seventh volume of the *Transactions* of the Royal Medical and Chirurgical Society, by my colleague, Mr. Adams.

To effect a cure, the spine must be slowly pressed into its proper shape, and there held by means of instruments until the same adaptive process of contraction, which ensued in the deformity, re-establishes the figure.

These remarks naturally point to some important conclusions in the matter of treatment.

First, any system based upon the development of muscular

agencies is fundamentally wrong. When the spine is straight, and not before, can good result from the action of the extensor muscles.

Secondly, although it be true that in some early cases the deformity is very greatly lessened by the patient assuming the recumbent posture, yet experience teaches us, that want of exercise is followed by loss of tone, and impairment of general health, under which circumstances the spine is little calculated to retain its normal form when the patient resumes the upright posture.

Thirdly, mechanical support must be constant and sufficiently firm to act upon the vertebral column; hence instruments must be strongly made. Mr. Tamplin has shown that those of slighter make *bend back on* themselves, instead of acting upon the curvature; they yield to the vertebral column instead of commanding it. The nature and peculiar construction of the instruments now in use can be best illustrated by particular cases.

[*To be continued.*]

Transactions of Branches.

ROCHESTER, MAIDSTONE, AND GRAVESEND DISTRICT MEETINGS, IN CONNECTION WITH THE SOUTH-EASTERN BRANCH.

AN ENUMERATION OF THE DIFFERENCES BETWEEN THE PERIODIC AND CERTAIN OF THE ERUPTIVE FEVERS: WITH REMARKS ON THEIR NATURE AND PREVENTION.

By Frederick James Brown, M.D., Chatham.

[*Read February 12th*, 1858.]

I. In the first part of this paper, I furnish a bare enumeration of the differences between the two divisions of fever, without entering into an examination of their distinguishing characteristics; for an inquiry into any one of these—such, for instance, as periodicity in the one compared with critical days in the other division—would itself occupy a paper.

The following is an enumeration of the distinguishing characteristics of periodic and of eruptive fevers:—

Periodic fevers.	Eruptive fevers.
1. Periodicity.	Critical days.
2. Enlargement of the spleen.	Lesion of an internal organ and cutaneous eruption.
3. Hyperinosis.	Hypinosis.
4. Leukæmia.	Pyæmia.
5. Indefinite duration.	Definite duration.
6. Subsidence on removal from the locality in which periodic fevers occur.	Continuance of eruptive fevers, notwithstanding removal.
7. Repetition of attacks.	Immunity as the rule.
8. Recurrence on exposure to cold and damp, after an interval of months, or even years, during a residence in non-malarious districts.	Relapses.
9. Absence of contagion in cold climates.	Contagion in many.
10. Permanently injurious effects on the general health and on the viscera.	Recovery of health, with sound viscera, as the rule.
11. Telluric causes.	Organic causes.
12. Acclimatisation.	Inoculation.
13. Immunity of the lower animals.	Febrile epizootics.
14. Prevention of periodic fevers by the peat in boglands.	Prevention of eruptive fevers by ventilation, by cleanliness, and by care respecting the ingesta.
15. Prevention by quinine and other nervine tonics.	The want of any trustworthy specific remedies that will guard against the bad consequences of the animal poisons causing the eruptive fevers.
16. The influence of a high wall or side of a street in protecting from periodic fevers.	The absence of any such protection in the case of eruptive fevers.

17. Antagonism, to a certain degree, of the two divisions of fever.

It will be observed that whilst some of the characteristics may be compared, others contrast, the one with the other.

II. In the second part of this paper, I beg leave to lay before you some speculative considerations as to the nature of periodic fevers and of typhoid and typhus fevers.

I will first treat of periodic fevers, and will state the matter in the form of propositions.

First proposition. That enlargement of the spleen precedes or follows the first attack.

The researches of Surgeon Dempster and Major (now Colonel) Baker, in India, show conclusively that splenic enlargement is a direct effect of malarious influence. These researches establish the fact that a large percentage of the inhabitants of malarious districts present an anatomical element of disease; namely, enlargement of the spleen.

Second proposition. That no poisonous matter is introduced into the blood.

I find periodic fevers arising in damp situations where there is no decaying animal or vegetable matter, therefore I cannot but accept the conclusion that periodic fevers are produced by some other cause than gaseous emanations or poisonous matter in the fluid or solid form, from decaying organic matter. I fully admit that fœtid gases produce an injurious effect upon the human organism; but this question is distinct from the subject under consideration.

The sequence of occurrences in periodic fevers is utterly opposed to our ideas of disease produced by a blood-poison. Take those affections in which a virus is introduced into the blood, such as syphilis and hydrophobia, and compare them with ague. It is true that syphilis presents many remarkable progressions and retrogressions in its course; but the cutaneous eruption, the contagious nature of the disease, and its capability of being propagated by inoculation, and other circumstances, mark a wide separation between this disease, the effect of a blood-poison, and ague, a disease caused by diminished nerve-force. The phenomena witnessed in periodic fevers are wholly different from those seen in diseases that clearly arise from the introduction of animal poison into the blood. With respect to diseases produced by vegetable poisons, I am not aware of the existence of any such. We are acquainted with diseases caused by mineral poisons; but poisons from the vegetable kingdom kill rapidly without inducing a train of symptoms that endure beyond a few days. In other words, the vegetable poisons produce acute toxæmia, whilst the animal and mineral poisons give rise to acute, subacute, or chronic toxæmia.

Another argument in opposition to the idea that periodic fevers are due to blood-poisons, is as follows:—A man may contract ague in Essex, may go to Edinburgh (where there is no endemic malarious disease), may remain free from ague for a year or more, and be affected by the disease on the occurrence of a cold wet day in spring. This is a series of occurrences never observed in any disease that is proved to be due to virus.

Third proposition. That damp earth is necessary to the production of periodic fevers.

Damp must be in connection with soil for the production of these fevers. The damp decks of a ship will not originate this form of fever, although a recurrence of fever may take place from this cause. It may be objected to this proposition, that the bogs of Ireland have no influence in producing ague. It is true that the Irish bogs do constitute a remarkable exception. I put forth the hypothesis that the peat acts as a nervine tonic, and so enables the individuals residing on the damp land to bear the loss of an abnormal amount of electricity with impunity.

Fourth proposition. That periodic fevers are due to telluric causes; viz., the abstraction of positive electricity from the human body by induction, in abnormal quantity, through the agency of damp earth.

The fact is well ascertained that positive electricity is removed in abnormal quantity under the circumstances just enunciated. The order of sequences I give hypothetically. Abstraction of positive electricity in undue proportion; disordered function of the sympathetic nervous system; changes in the constitution of the blood, viz., first, hyperinosis; finally, leukæmia; changes in the condition of the spleen and liver.

It may be objected to this proposition, that the lower animals grazing on damp land should experience the same ill effects as man.

I attribute the immunity of the lower animals to the natural clothing of hair and wool that they possess, which preserves

the equable temperature of their bodies and acts as a non-conductor of electricity. It is certainly an extraordinary circumstance that the lower animals should enjoy immunity from periodic fevers, but it is a fact. It is equally certain that the drainage of marshes and the diminution of cases of ague in a malarious district bear a direct ratio to one another. Hippocrates banished periodic fevers from the city of Abydos by causing the marshes in its vicinity to be drained; and I believe that London might be similarly freed from malarious diseases. In my opinion, convict labour might be beneficially employed in the drainage of the marshes bordering the Thames and the Medway. In this way, men that offend a civilised community might make reparation for their faults. Dr. Handfield Jones has drawn up a list of about a score of diseases allied to ague, such as neuralgia, certain forms of rheumatism, neurosis of the nervus vagus and solar plexus. All these diseases will disappear when we bring the *will* to bear upon them. The people have the *power:* they only want the *knowledge* and the *will*. It is for us to supply the knowledge and to stimulate the will.

I have next to inquire into the nature of typhoid and of typhus fevers. I will premise by a few remarks on pyrexia in its most extended signification. Pyrexia consists in an augmented temperature of the skin, due to an augmented cremation of the tissues of the body. The increased temperature of the skin can be measured by the thermometer, and it is found even during the stage of rigors. Pyrexia attendant upon inflammation I believe to be due to changes in the condition of the sympathetic nervous system, and to changes in the constitution of the blood, and to alteration in the condition of the tissues. Catarrhal and biliary pyrexia I attribute to similar changes, arising from arrested or altered secretions. Typhoid fever I believe to be caused by the application to the alimentary canal of the excreta of the intestines that have undergone alterations outside of the body. The sequence of occurrences is as follows:—Fæcal matters (altered in their nature) are swallowed in water in almost all towns, and even in lone houses in the country, in consequence of the proximity of wells to privies and drains: blood-poisoning and disordered sympathetic nerve-force result: the skin and the glands of the small intestine become affected: and the disease known as typhoid fever is produced, having a duration of from fourteen to twenty-eight days. Typhoid is essentially a privy-soil fever, but night-soil can give rise to other diseases besides typhoid fever; viz., cholera, diarrhœa, and dysentery.

I now proceed to consider the nature of typhus fever. I believe that typhus is produced by the respiring of air charged with a larger per centage than usual of animal extractive matter present in the expired air. The excretory matters from the lungs and skin, when respired in a concentrated state, as occurs in over-crowded apartments, give rise to typhus fever, which has a duration of fourteen days, and which expends its force on the lungs and cerebro-spinal system. Typhus is thus an ochletic disease, or, in other words, a disease caused by over-crowding, and is essentially distinct from typhoid fever.

An interesting experiment was performed, a short time since, on the continent. An animal extractive matter was obtained from the respiratory and cutaneous excreta of numerous individuals congregated in one apartment. This extractive matter was injected into the blood of a dog. The animal died of low fever in fourteen days.

Now, it will be observed that fourteen days constitute the full period of typhus fever. If this experiment shall be repeated many times with the same result, I shall deem the matter to be demonstrated.

That overcrowding is the cause of typhus fever, is further shown by the occurrence of this form of fever in jails, barracks, and the habitations of the poor in large cities. Civic populations usually suffer from both typhoid and typhus fever, because of the contamination of the water and the overcrowding of the inhabitants; but in towns occupying much space in proportion to population typhus bears a small ratio to typhoid fever. This is the case with Rochester and Chatham, as I showed in a paper read at the Epidemiological Society in April 1855.

III. In the third part of this paper, I beg leave to point out the measures necessary for the prevention of the fevers that we have been considering. Marshes must be drained; but until this can be effected the inhabitants of paludal districts should take a daily dose of quinine, and should wear flannel clothing and a non-conducting material within their boots. The conversion of marshes into bogs might prevent ague (could it be effected by the cultivation of the plants found on bogs or by other means), but it would not meet with the approval of agriculturists and graziers; therefore drainage is the only practicable mode for the conversion of marshes into salubrious ground. Then as to the prevention of typhoid fever; this can only be obtained by a pure water-supply from a source distant from towns, and by effective sewerage. The prevention of typhus would be certain if abundant space were included within the area of towns, together with an improved construction of houses and free ventilation. Our public buildings, such as Hospitals and Union Houses, should be built after the model of the Hospital at Bordeaux and that lately in use at Renkioi. Ancient Rome suffered from periodic fevers, because of the proximity of the Pontine marshes; and she probably suffered from typhus in consequence of the enormous population within her walls; but I should imagine that she was free from typhoid fever because of the purity of the water supplied by her magnificent aqueduct, and the effective sewerage that was employed.

Before concluding this paper, I wish to remark that bad smells will not produce typhoid fever, under ordinary circumstances, although they cause nausea and depress the general powers of life. But now and then it occurs that the opening of privies long closed is directly followed by typhoid fever of a malignant type. Such an instance occurred in Rochester several years since. I believe that in these instances the fæcal matters (altered in quality) are actually swallowed with the saliva,—minute particles impinging on the pharynx, and being thus conveyed to the lining membrane of the alimentary canal.

In conclusion, I have to thank you for your attention to a paper consisting of facts and hypotheses intermixed, without a strict and scientific examination into any single subject; but I know that you will agree with me as to the power that we possess of controlling the occurrence of typhoid, of typhus, and of periodic fevers.

CASE OF COMPLETE DISLOCATION BACKWARDS OF THE TIBIA, AT THE KNEE-JOINT.

By Charles Robert Thompson, Esq., Surgeon, Westerham.

[*Read February 12th*, 1858.]

October 12th, 1853. R. W., aged 25, a tall, and strongly built man, of irregular habits, was walking in a state of intoxication in the custody of a policeman; when, it being dark at the time, he darted away, and made a spring over a low wall, having a deep fall on the other side. Here he lay helpless, and those who got him home described his right leg as "hanging loose, as if it were broken right through at the knee." The leg was tied up in a pillow, and kept wet with cold lotions through the night.

October 13th. An examination about twelve hours after the accident disclosed the following condition of parts: great distortion, swelling, and ecchymosis about the right knee, particularly in the popliteal space. The head of the tibia, with the fibula attached, was thrown altogether behind the femur, into the popliteal space; the condyles of the femur riding up and projecting over the tibia. The patella was immovably fixed between and over the condyles, not drawn upwards, its ligament being evidently tightly stretched. The tibia was so much drawn up under the femur, that its tubercle could not be felt; and on passing the hand down over the knee, it fell abruptly from the patella on to the upper part of the shaft of the tibia. The whole leg below the knee was somewhat inverted, and directed forwards. There was shortening between the internal condyle and the inner malleolus, as compared with the sound limb, to the extent of one inch and a quarter. On pressing firmly in the ham, the head of the tibia could be felt, lying under the inner condyle. Both tibial arteries were felt pulsating, though but feebly, at the ancle. The patient had lost all power of raising either knee, or foot, from the bed, and any attempt to move it gave great pain. During the examination, no crepitus was detected. When quiet, he did not suffer much, and there was no constitutional disturbance.

From a consideration of these symptoms, and the manner in which the injury occurred, we concluded that there was a simple dislocation of the tibia and fibula backwards, uncomplicated by fracture; with laceration of the posterior ligament, and probably of both crucial ligaments; the lateral and anterior ligaments being probably unruptured, though much stretched and injured.

Having fixed the pelvis, and applied a round towel at the ancle, we tried to draw down the tibia into place by straight extension; but tired ourselves to no purpose. On relaxing the

extension and forcibly bending the knee, the tibia came into perfect position; but whilst we were congratulating ourselves at its reduction, the hand was removed from under the knee, and instantly the head of the tibia slipped back to its old situation, the whole deformity being renewed. By again flexing it, it was again easily reduced, and we then secured it in this position, well supported by firm pillows, and bent to about a right angle. After some consideration, we thought that it would be better, if possible, to get it straight, as giving all the ligaments a better position for repair, and securing a more useful limb, in the event of any anchylosis. It was decided, therefore, to apply the pulleys next day.

October 14th. No constitutional disturbance had occurred; but there was slight pain about the joint, with great swelling and discolouration.

On removing the pillows, the parts at once resumed their abnormal situation, the deformity being as great and characteristic as at first. We got the man thoroughly under the influence of chloroform; and then applied the pulleys to the ancle, with counterextension at the perineum, pulling in a direct line. Extension was kept up most thoroughly and carefully for an hour; by which the tibia was drawn down slightly, but not sufficiently to get it over the condyles of the femur. It was tried to lift the tibia into place by a towel under the ham, but unsuccessfully. This failing, the extension was relaxed, and the knee again flexed, being thus easily reduced. In this state we determined to leave it; the man lying on his back, with the knee bent at almost a right angle, and firmly secured on hard pillows.

In a few days, the swelling and pain about the joint entirely subsided, and he had no constitutional irritation whatever.

About three weeks later, I found one day that the pillows had sunk, and the tibia had fallen back into the ham again. By putting my hand under it, and bending the knee a little more, I had no difficulty in replacing it; the bone feeling quite loose, as if all its supports were gone.

November 27th (nearly seven weeks after accident). He had remained in the same position, the pillows gradually sinking a little, so that the knee was not at so acute an angle. Mr. J. A. Kingdon carefully examined the limb with me. We found the bones holding their proper relations; but on removing the pillows, the head of the tibia still was very movable, and slipped away towards the popliteal space, but not so readily, nor to such an extent as it did at last report, showing that some repair was going on. He had no power of raising the foot from the bed; possibly because, directly the rectus femoris acted, the head of the tibia slipped backwards, so that the fulcrum of the lever was lost. When he put the rectus in action, the ligamentum patellæ was put on the stretch and stood out distinctly, showing that it was quite firm.

Dec. 18th. (nearly ten weeks after the accident). There was much more firmness about the joint; he was now able to raise the foot freely off the bed; and on removing the pillows the tibia did not fall back, or but very slightly. The joint could not be straightened beyond an obtuse angle, any attempts to do so giving great pain in the hamstring, where there was considerable thickening, He was able to flex the limb pretty freely without pain.

I carefully supported the joint with leather strappings and bandages, and made him get up, and begin to use it gently. In a few weeks more he got the foot well down to the ground, and nothing could be noted but a slightly increased mobility of the tibia, and, in walking, a jerking action in advancing the right foot, arising, I suppose, from a want of firmness in the knee, probably depending on imperfect repair of the crucial ligaments.

He was soon at work again as a farm labourer; and at this time, more than four years from the injury, although I repeatedly meet him, I have heard no complaint about the limb. He walks now without the slightest lameness.

Remarks. This case is of considerable interest, not only from its great rarity, but also on account of the position adopted in its treatment, and its very favourable result.

After a search through what references I possess, I have found only one similar case, which is recorded by Sir A. Cooper, and occurred in the practice of Dr. Walsham. In this instance the tendon of the rectus was torn across just above the patella, and the tibia displaced as in our case; the dislocation was reduced by straight extension, and the patient recovered most perfectly. Taking this case, I suppose, for a guide and precedent, late authors (S. Cooper, Druitt, Fergusson, Skey), all direct such a dislocation to be reduced by straight extension, and say that it is not a matter of difficulty.

With us, the adoption of the bent position was a matter at first almost of accident, and afterwards of necessity: but the luxation was so easily reduced in that way, and the resulting repair so perfect, that it would be well worth trying in a similar case. Mr. Kingdon was good enough to ascertain for me, on the dead subject, with how little division of ligaments it is possible to produce a complete dislocation backwards at the knee; and he tells me that he was able to place the bones exactly as they were in our case, by dividing the posterior (Winslow's) ligament, and the posterior or internal crucial ligament. Possibly such was the amount of actual rupture in this instance; but all the neighbouring structures must have been much bruised and lacerated.

It is singular to remark how little pain or inflammation followed so serious an injury; never for a moment causing any constitutional irritation, or requiring any special treatment. This was also peculiarly remarkable in Dr. Walsham's case, showing the marked difference between an injury, however extensive, unaccompanied with any external wound, and another where there is communication with the air, even through the smallest puncture.

Reviews and Notices.

A Treatise on Rheumatic Gout, or Chronic Rheumatic Arthritis of all the Joints. By Robert Adams, M.D., A.M., M.R.I.A.; Ex-President of the Royal College of Surgeons in Ireland, and of the Pathological Society; Surgeon to the Richmond Hospital, Dublin. pp. 362. London: John Churchill. 1857.

Illustrations of the Effects of Rheumatic Gout, or Chronic Rheumatic Arthritis, on all the Articulations: with Descriptive and Explanatory Statements. By Robert Adams, M.D., A.M., M.R.I.A., etc. 4to, pp. 31. London: John Churchill. 1857.

On Rheumatism, Rheumatic Gout, and Sciatica: their Pathology, Symptoms, and Treatment. By Henry William Fuller, M.D.Cantab., Fellow of the Royal College of Physicians, etc. Second edition. London: 1856. (Chapter xi. On Rheumatic Gout.)

[*Concluded from page* 126.]

In the second part of his work, Dr. Adams describes the pathological appearances produced by chronic rheumatic arthritis in the various articulations.

In the *hip-joint*, the changes produced by the disease were delineated in 1793 by Edward Sandifort, of Leyden, in his *Museum Anatomicum*. This author, however, seems to have entirely confined his attention to the appearances presented in the dead body. Since that time, the disease has been alluded to by Mr. Benjamin Bell, in his work on the Bones; and has been well described by Professor Smith, of Dublin.

For many years, Dr. Adams, and the clinical lecturers in the Dublin Hospital, have been accustomed to describe the affection of the hip under the name of *morbus coxæ senilis;* but, as it has been found to occur as early as the age of 30 or 40, Dr. Adams proposes to abandon the title connecting it with old age, and to use that of "chronic rheumatic arthritis of the hip".

The author ascribes the disease in some cases to a constitutional, in others to a purely local origin. With regard to the latter, we must refer to the doubt we expressed in the former part of this notice. The symptoms of the affection are thus given:—

"The patient complains of stiffness in the hip-joint and about the great trochanter; of a dull, boring pain, which extends down the front of the thigh to the knee. The stiffness is most felt in the morning, when the patient commences to walk; but after some exercise the movements of the joint become more free. Should the patient have walked very much during the day, the pain is always more severe in the evening. The uneasiness, however, gradually subsides after he has retired to bed. When the patient throws the weight of his body fully on the affected joint, the pain is always increased; but if the surgeon press on the great trochanter, or adopt any other expedient, so as to push the head of the bone even rudely against the acetabulum, these manœuvres are the sources of

no uneasiness whatever to the patient. Although we can easily satisfy ourselves that no actual anchylosis exists, still it is evident enough that the motion of rotation is lost, and that flexion is confined within very narrow limits. When we place the patient in a horizontal position, and endeavour to communicate any of these movements to the hip-joint, he complains of some pain, and an evident crepitation can be heard and felt deep in the articulation. The affected limb has the *appearance* of being two or three inches shorter than the other; while, on accurate measurement, the real shortening will be found not to amount to an inch. This greater appearance of shortening than exists in reality arises from the obliquity of position of the pelvis relatively to the spine, and the elevation of the former at the affected side is such, that in the ordinary attitude of standing the crest of ilium and the last short rib approach nearer to each other at this side by two inches than do those of the opposite side.

"The patient walks very lame, and with the foot and whole limb greatly everted. The nates of the sound side is unusually prominent, while that of the affected one is quite flat, and no trace of the lower fold of the gluteus is seen. The muscles of the thigh also seem somewhat atrophied; still they do not want for firmness; and we may uniformly observe that the calf of the affected limb is not inferior in size and firmness to the other. When we minutely examine the great trochanter, we find it larger and more prominent than usual; and about the situation of the acetabulum, the horizontal branch of the os pubis, and the lesser trochanter, bony protuberances can, upon careful examination, usually be recognised." (pp. 55-7.)

The diagnosis of chronic rheumatic arthritis of the hip, in the constitutional form, when several of the smaller joints are also affected, is easy; but when the disease is local, it may be mistaken for sciatica, or for a scrofulous affection of the joints. The description of the symptoms given above will show the difference; Dr. Adams has, moreover, carefully pointed out the distinguishing marks of the respective diseases. The anatomical characters are well defined, and are fully described by Dr. Adams. They usually consist of atrophy of the muscles around the affected joint; thickening, and sometimes partial ossification, of the fibrous capsule; vascularity of what remains of the synovial membrane, which is often fimbriated where it embraces the neck of the femur; removal of the cotyloid and round ligaments, and Haversian gland; enlargement and deepening of the acetabulum, which is lined with a dense enamel, and has its brim beset with bony nodules and asperities; shortening of the neck of the femur, and inclination of its axis to a right angle with the shaft of the bone; and enlargement and flattening of the head of the femur, which is covered with an enamel, especially on the upper surface. In the dried head of the femur, the parts not covered with enamel are beset with pores to a considerable depth. These pores Dr. Adams has found in the recent state to be filled up with a very red vascular tissue, which, in cases where there has been no motion of the joint, projects and forms a fine vascular membrane, investing the articular surface of the head of the femur and of the acetabulum—there being in these instances no eburnation.

These are the principal appearances, subject, however, to certain variations.

The pathological appearances, especially the shortening of the neck of the femur, have, according to Dr. Adams, in some cases given rise to the idea that union of an intracapsular fracture of the neck of the thigh-bone had taken place. An instance of this is recorded as having occurred in the person of the late Mr. Matthews, the comedian.

In the *shoulder-joint*, the main features of chronic rheumatic arthritis are the same as in the hip-joint. The principal anatomical characters in which the disease in the two joints agrees, are:

a. Removal of the round ligament in the hip-joint; removal of its analogue, the long tendon of the biceps, in the shoulder-joint.

b. Hypertrophy of the capsular ligament, with highly developed fimbriæ in the interior of the synovial sacs.

c. Enlargement and eburnation of the articular surfaces, and an exuberant growth of bone surrounding the corona of the head of the femur, and the circumference of the articular surface of the head of the humerus.

d. The peculiar nature of the pain; the stiffness of the joint when first moved in the morning, and subsequent improvement under exercise during the day; the sub-inflammatory condition of the joint, which does not, however, altogether impede its use, and which never proceeds in either articulation to suppuration or anchylosis.

The disease, then, in the one joint is analogous to that in the other; but there are certain peculiarities attending the shoulder-joint which merit attention.

The joint contains, besides the synovial fimbriæ, rounded cartilaginous productions, appended by membranous threads to the free surface, internally, of the various structures of the joint. Some of these bodies are small: others large. Dr. Adams has seen one an inch and a half long. These "foreign bodies" are more rarely found in the hip-joint; but they are also observed in the other articulations.

The acromion sometimes presents a remarkable appearance, being traversed in the original line of the junction of its epiphysis by a complete interruption of its continuity, *as if fractured:* and the two portions may become widely separated from each other. In one instance, Professor Smith has found the entire acromion process separated. That the separation in these cases is not the result of accident, has been confirmed by a case brought before the Pathological Society of Dublin by Professor Smith. The patient had apparently long suffered from chronic rheumatic arthritis of all his articulations, and especially of the shoulder-joints; and in this case *both acromion processes* had been separated at the line of junction of the epiphyses.

According to Dr. Adams, certain pathological appearances presented by chronic rheumatic arthritis of the shoulder-joint have been mistaken often for the result of accident. We allude to partial dislocations, or *subluxations*. Dr. Adams quotes and criticises with much ability a case recorded by Sir A. Cooper, in his work on *Fractures and Dislocations*, as one of partial dislocation of the head of the os humeri; and argues strongly in favour of its having been in reality one of partial luxation—the result of chronic rheumatic arthritis. We can only refer to the author's remarks on this subject—an important one as regards both diagnosis and treatment. The writings of Mr. E. Canton of London, and Professor Smith of Dublin, also contain much profitable information.

In the *elbow-joint*, the disease is generally constitutional, affecting several other joints at the same time.

The anatomical characters are various. The bones forming the joint are sometimes atrophied; sometimes hypertrophied. The cartilage of incrustation is always removed; sometimes the ends of the bone are covered with enamel, sometimes their cellular structure is left exposed. The articular surfaces of the humerus and ulna are marked by ridges and grooves in the line of flexion and extension; and their surfaces are generally studded with bony nodules and vegetations.

Additamentary bones are sometimes present. The olecranon process is sometimes enlarged and severed from the ulna by a transverse line of division. We have already seen that this separation takes place in the acromion process; and it has also been found in the coronoid and styloid processes of the ulna, and the tuberosity of the tibia. The head of the radius in many cases becomes greatly enlarged and globular, and the corresponding surface of the humerus becomes even excavated, instead of being convex. Sometimes the upper end of the radius is excavated from side to side, and presents an ovoidal outline. In most of the cases of chronic rheumatic arthritis of the elbow-joint, examined by Dr. Adams, he has found what are called "foreign bodies or pendulous

bodies." These vary from the size of a pea to that of a walnut; some hang by threads in the interior of the synovial sac, while some are loose; some are cartilaginous, and others bony. In two cases their number amounted to twenty and forty-five respectively. The capsular ligament of the joint, naturally rudimentary, has been found greatly thickened. The bones entering into the elbow-joint became, in many cases, so enlarged as at first sight to resemble the knee-joint; the shafts also become heavier and harder than natural, being densely penetrated with phosphate of lime.

The anatomical characters of chronic rheumatic arthritis of the *knee-joint* are in the main analogous to those observed in other articulations. The diagnosis of the disease from some other affections is thus given by Dr. Adams:

"Although this chronic disease of the knee-joint is accompanied by the ordinary symptoms of a subacute arthritis, the constitution of the patient is but little disturbed by it; the affected limb is at first capable of extension and flexion, the patient can walk long distances without suffering much inconvenience, except a temporary increase of stiffness of the joint. He does not complain of spasmodic startings of the limb, and when the ordinary experiment is tried, of percussing the heel so as suddenly to direct the condyle of the tibia with force against the lower articular surface of the femur, he suffers no pain. Thus we learn that the disease differs from that wearing disease, ulceration of the cartilages of the knee-joint, which, in the end, so frequently demands amputation.

"The disease of the knee-joint, familiarly called white swelling, is sometimes unaccompanied with pain, the patient at first being able to walk about, and the constitution remains undisturbed; but the local appearance in white swelling and chronic rheumatic arthritis of the knee is very different. In the former there is much wasting of the limb above and below the affected joint; the swelling is not well defined; it is elastic, with a degree of firmness. In the chronic rheumatic case, during the early stage, when swelling exists, it is soft and fluctuating, and evidently consists in an effusion into the synovial sac of the joint.

"The soft cellular membrane around the synovial sac, and behind the tendon or ligament of the patella, does not become infiltrated in the chronic rheumatic case, as it does in white swelling. On the contrary, in the chronic rheumatic affection of the knee-joint, the tendon or ligament of the patella stands out quite distinct, and presents its normal appearance where it is inserted into the tuberosity of the tibia.

"The peculiar crackling sound elicited on any movement being communicated to the knee-joint,—the rising crests and rims of bone which can be felt bordering the edges of the trochlea of the patella and the *margins* of the femoral condyles,—the enlargement and increased breadth of the bones, particularly of the patella,—all these characters, found combined in any given case of an affection of the knee, sufficiently point it out as an example of chronic rheumatic arthritis." (pp. 196-197.)

In the *joints of the wrist and hand*, chronic rheumatic arthritis presents itself more frequently than anywhere else. The *ankle-joint*, on the contrary, is very rarely affected by it. We must pass on, however, to notice some other articulations.

The *temporo-maxillary articulation* is sometimes, though rarely, affected by chronic rheumatic arthritis. The disease in this situation appears to have been first described by Cruveilhier in 1830: and the second recorded case was mentioned by Dr. Adams at the meeting of the British Association for the Advancement of Science in 1836.

The symptoms of the disease in this joint do not seem to be very clearly ascertained.

"The patient's attention appears to be usually drawn away from the consideration of this complaint, as it effects the jaw, by the more severe sufferings which he generally endures from its simultaneous existence in some of his other articulations, as the wrists, elbows, knees, etc. Upon particular inquiry, however, we shall learn that the patient complains of an incapacity to open the mouth fully, of a stiffness of the joint, and that he hears peculiar and disagreeable noises when the jaw moves.

"As in some few cases the condyle and ramus of the lower jaw may be found enlarged and elongated, so in others the neck of the bone may be so much shortened as not to rise above the level of the coronoid process; hence it is plainly to be inferred that, although an altered position of the chin is a phenomenon to be expected in those cases, no special position of its central point can be referred to as a pathognomonic sign of this disease.

"In some rare cases, there may be an hypertrophy and elongation of the neck of the condyle, as also of the ramus of the lower jaw on one side; and in such a case there must of course be a crooked or distorted state of the lower part of the face, and the chin will point to the opposite side. On the contrary, when the disease affects symmetrically, as it most frequently does, both temporo-maxillary articulations, the chin becomes advanced and elevated as in the old and edentulous subject." (pp. 273-4.)

The anatomical characters of the disease in the temporo-maxillary joint, so far as the bones are concerned, seem well known: but more remains to be learned of the state of the soft parts in the early stages.

"This disease in the articulation of the lower jaw produces effects analogous to those found in the other articulations when they have been visited by the same malady. Thus the bony surface of the cavity for the reception of the condyle or head of the bone is found occasionally extended, sometimes deeper or more excavated than natural; but it is worthy of observation, that, although the fundus of the glenoid cavity be thus excavated, it does not seem that any process of thinning or attenuation of the bone takes place. On the contrary, if we hold up between us and the light a specimen of a temporal bone, the glenoid cavity of which had been affected by this disease, we find that the fundus of this articular cavity is really thicker and less transparent than the sound one.

"The condyle or articular head of the lower jaw, under the influence of this disease, assumes various forms, sometimes it is very much enlarged, and the neck which supports it is very much elongated. Sometimes, on the contrary, this neck is shortened, and the head is depressed and flattened out, as it were 'forced downwards by the action of some great pressure'. Occasionally, as in Cruveilhier's case, the head is almost altogether removed. The interarticular fibro-cartilage, as well as the cartilage of incrustation, has been usually found to have been absorbed, and the porous surface of the bones to be exposed, and to present a red colour." (pp. 275-6.)

Eburnation of the bony surfaces of the joint is rare; and Dr. Adams is not aware that "foreign bodies" have been found in it, if one can be excepted, recorded by Haller, in which the cartilage was removed, and (as Haller thought) "seemed to have been formed into about twenty small bodies which were found with the capsule of the articulation."

Chronic rheumatic arthritis of the *sterno-clavicular and acromio-clavicular articulations* is next described.

When the disease attacks the *spine*, the patient

"Complains of stiffness in his neck, back, and loins, of rheumatic pains, increased by every change in the weather. If the *cervical* vertebræ be the seat of the affection, a crackling noise is heard on motion, verifying the remark made by the earliest observer of this disease, Haygarth, who says: 'In a few patients, a crackling noise is perceived on motion, particularly in the neck.' The rotatory movement of the first vertebra on the second, permitting the patient to turn his face from side to side, is usually preserved, whilst the rest of the cervical region seems stiff and rigid. When the *lumbar region* is affected, the power of extension of the spine, or even standing completely erect, becomes difficult. When the *dorsal* vertebræ are the seat of this disease, the back is rendered much more convex posteriorly than natural, the chest seems sunk in, and the figure becomes not only stooped and bent forwards, but an absolute diminution of the length of the spinal column and height of the patient has been observed to have taken place.

"Some of the articulations of the lower limbs in these cases may be so far affected that the patient's powers of progression may be greatly impaired, or even prevented altogether; but I would here wish to be understood to say that there is really nothing in the affection of the spinal column itself, or in its joints, calculated to prevent the patient moving slowly about. Vibratory motions of the column or jars, such as are produced by travelling in ordinary vehicles, do not so much incommode the patient as might be apprehended. Indeed, if we make the experiment, we shall find we can place the palm of the hand on the vertex of the patient's head, firmly press down, and

even give a species of succussion in the longitudinal direction to the whole spinal column in these cases, and yet this force, thus applied, while the patient is either sitting or standing, shall not cause him pain. We may here remark, that by such an experiment as this last we can readily distinguish this disease from articular caries of the vertebræ, with which it might by possibility be confounded; for we know that a patient threatened with articular caries of the vertebræ will shrink back from permitting the slightest pressure being made in the direction of the axis of the spinal column, much less will he allow any jar or shock to be communicated to it." (pp. 285-7.)

Dr. Adams agrees with Mr. Canton and Professor Smith, that chronic rheumatic arthritis is more common in the cervical and lumbar regions than in the dorsal; and the atlas and axis, possessing most motion, furnish more specimens of the effect of the disease than all the other bones of the spine taken together.

We have thus given an outline of Dr. Adams's work; which is illustrated by a number of cases and by several woodcuts. The *Atlas* which accompanies it contains eleven plates, several being coloured, showing the pathological appearances described in the work. The plates are themselves, too, accompanied by full descriptions.

As a record of facts observed with regard to rheumatic gout, or chronic rheumatic arthritis, Dr. Adams's book and atlas of illustrations form a most valuable contribution to our knowledge, so far as symptoms and pathological changes are concerned. For the author, for Dr. Fuller, and other labourers in the field of medical science, it now remains to investigate the origin and causes of the disease, to determine its true nature, and to point out its appropriate remedies.

An Introduction to Practical Chemistry, including Analysis. By John E. Bowman, F.C.S., late Professor of Practical Chemistry in King's College, London. Edited by Charles Bloxam, Professor of Practical Chemistry in King's College, London, etc. Third edition. pp. 288. London: John Churchill. 1858.

A Manual of Qualitative Analysis. By Robert Galloway, F.C.S., Professor of Practical Chemistry in the Museum of Irish Industry, etc. Second edition. pp. 197. London: John Churchill. 1858.

The useful little work of the late Mr. John Bowman is now presented by his successor, Mr. Bloxam, who has made a few alterations and additions in it, with the object of rendering it more valuable as a guide in the laboratory. It contains, as before, full instructions for the use of chemical apparatus.

Mr. Galloway divides the substances to be examined into a number of groups; and the following course of study is recommended by him:

"The student commences with the first group; and after he has performed all the experiments given in the table of that group, several analyses are given him, each of which he examines for the members of this group. When he can perform these practical exercises correctly, he commences the second group—first performing the experiments in the group, and then analysing several solutions for the members of this group. When he can perform these correctly, he examines several solutions for the members of the first and second groups. In this progressive way he passes through the groups; so that by the time he has completed them, he will have become an accurate analyst." (p. vii.)

There is no doubt that any one, who will follow carefully the instructions given by either of these authors, will attain a fair knowledge of practical chemistry. Of the two books, that of Bowman's *Introduction* seems to be the best; and, we believe, it is already in very general use among chemical students, who will find that the intentions of its author are well followed up by its present editor.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, FEBRUARY 27th, 1858.

SANITARY REFORM IN THE ARMY.

The recommendations of the Royal Commissioners with respect to the sanitary condition of the army are so important, that if carried out (as we have no doubt they will be), a complete revolution must ensue in this Medical Department, and a vast amelioration in the condition of the soldier will be the inevitable result.

Among the more important of these suggestions, are those which refer to the education of the army medical officer. At the present moment, a young fellow, who has passed his examination, such as it is, is sent to Chatham to dawdle away his time in doing little or nothing; and in time of war he is drafted at once to his regiment, totally ignorant of the special knowledge required for the service, and but too often an unlicked cub in the ordinary knowledge of his profession. It is proposed by the Commissioners that free quarters for forty probationers, or gentlemen who have passed their examinations, shall be provided at the great military hospital at Netley. The chairs of military surgery, now held in Dublin and Edinburgh, should be transferred, according to the recommendation of the Commissioners, to this hospital, where one professor should teach military medicine, and the other military surgery. To these, it is proposed to add a third professor, whose duty it would be to teach sanitary science and military hygiene. No one can doubt that under such a plan of instruction, the probationer will prove a far more efficient medical officer than he has any chance of becoming under the present slipshod system.

We think it is also highly important, that the examination of candidates for assistant-surgeonships in the army should be conducted by the same kind of Board as that which now examines the candidates for the medical service of the East India Company.

As regards pay and honours, the Royal Commission recommends a liberality which, while it is no more than the due of the medical man, will yet be received by him with joy and thankfulness. They recommend that the Army Medical Officers shall be entitled to the same share of honours and rewards as combatant officers of the same rank; and that, in the *Army List*, they shall have precedence of the commissariat, and that the whole regimental staff shall be placed before captains.

With regard to the necessity of consulting the medical authorities with respect to the construction of hospitals and barracks, the Commissioners are fully alive; and they recommend that on no account shall buildings of this kind be erected in future without their advice. Diet and cooking receive their

minute attention; and the Commissioners, no doubt, will astonish the military authorities by stating that, in their opinion, soldiers should be allowed to assimilate themselves, in these matters, to the habits of civilians. The filthy utensils of barracks will, we hope, be abolished; and we trust that the recommendation of these soldiers' friends, that every man shall have at least 600 cubic feet of air in his dormitory, will not be thought extravagant by the War Office.

The constitution of the Army Medical Department is, however, the most important subject which has received the attention of the Commissioners, inasmuch as it is in vain to make recommendations, and to lay down schemes of action, unless the machinery for carrying them out is duly provided. At present, the director-general of the army is overtasked with routine work of the most trivial kind, and the whole staff of the Medical Department is occupied with making reports; these reports have been regularly made now for upwards of seventy years, and the building that holds them is bursting with the numbers. Yet what has come of them? The Royal Commissioners have, we believe mainly at the instance of our associate, Mr. Ranald-Martin, recommended that the Board should be entirely reorganised.

"We recommend," say they, "that the Director-General should have three colleagues associated with him, selected for their eminence in medical, sanitary, and statistical knowledge respectively, and to be appointed by the Secretary of State for War. These officers would act as the council of the Director-General, and should have the power of submitting any questions to the Board, and of expressing their opinions in writing. All matters of routine would be referred to the head of the Branch to which they belong; and only such matters would be subjected to the consideration of the Council as are of importance. Minutes of all proceedings of the Council should be recorded by the secretary; but the Director-General, acting upon his own responsibility, might disregard those opinions if he consider it necessary, recording his reasons for so doing."

Dr. Andrew Smith, although signing the report, does not approve of this last recommendation; he thinks that the present system is best, and that the Director-General can gain information on special subjects by consulting those whom he may happen to think capable of giving him advice. It would not be difficult to show that this class of advice, given by persons in no way responsible, can be of little worth; and that the division of labour, recommended by the Commissioners, is infinitely the more preferable method of conducting the business.

The whole report is calculated to place the medical officer in the position to which he is entitled, and is pervaded by a spirit of justice towards him which is an agreeable change from the treatment he ordinarily receives at the hands of the authorities. "We have endeavoured," say the Royal Commissioners, in their conclusion, "to place the medical officer *in the position to which the dignity of his profession and the great services he renders justly entitle him*, and to assure to his advice and opinion that weight and influence in the administration of the army which are necessary to secure the health, and to maintain the efficiency of the troops." These are cheering words, and such as we have not heard for a long time; and we beg, in the name of the profession, to thank the Commissioners for their liberal and enlightened views of our science, and for their labours to secure to its votaries the just rewards and honours to which they have so long looked forward in vain.

There is, however, a good time coming; and we feel that this promised amelioration of our condition in the army will only be the forerunner of improvements in the civil service. Let Mr. Griffin take heart; the Poor-Law Board, for very shame, cannot ignore our claims, now that they have been so handsomely acknowledged by Her Majesty's Royal Commissioners.

THE WEEK.

Our associate Mr. T. L. Pridham, of Bideford, has received a pleasing proof of the gratitude of the poor, who, it would seem, are well aware how wretchedly the Union Medical Officers are paid for the services which they render in time of sickness. The town in which Mr. Pridham resides has, we are informed, been recently visited by severe epidemics; and, as a Poor-Law medical officer, Mr. Pridham has had a large amount of labour—but, from the guardians of the poor, no substantial recognition thereof beyond his ordinary small salary. The poor, however, have thought that their "doctor" deserves extra recognition for extra work; and accordingly, on February 14th, they presented him with a testimonial, which bore the following inscription:—"Presented by the poor to T. L. Pridham, Esq., surgeon, for his kind attention and efficient services during the time of the late fever. Bideford, Feb. 14th, 1858." A suitable address was delivered on the occasion of the presentation of this tribute of respect and gratitude, which, as it was quite unexpected on the part of Mr. Pridham, was especially gratifying to him. Besides this, since Christmas Mr. Pridham has, we are informed, received from the poor a handsome flower-vase, and a beautifully bound Bible and Prayer-Book. There are, perhaps, few in our profession who can count among gifts, occasionally offered in recognition of services rendered, any more gratifying than those which it has fallen to the lot of Mr. Pridham to obtain.

The trial of Mr. Thomas Monk, surgeon, of Preston, for forging the will of one Edward Turner, took place a few days ago. It is unnecessary to repeat the circumstances of the case, as they were given in detail in the Journal for December 12th, 1857. A verdict of *Guilty* was found by the jury: and the accused has been condemned to penal servitude for life. The judge, in passing sentence, alluded to the aggravation which the crime received from the position of confidence in which the prisoner had stood towards Turner, having been his medical attendant. Mr. Monk had also been apparently held in great honour among his fellow-townsmen, having been formerly mayor of Preston, and, at the time of his committing the crime, a borough and county magistrate.

Our attention has just been directed to another flagrant instance of the shameful manner in which medical men who devote their services to the public are allowed to be remunerated. A writer in the *Dublin Medical Press* of February 24, comments on the miserable remuneration paid to the medical officers of the Irish constabulary. Every medical gentleman in Ireland who attends the constabulary is allowed for his medicine and attendance but 1½*d.* weekly for each man: the

number at each station varies from eight to twenty. To those, as well as to their sub-inspector, who considers himself a gentleman, and is styled "the officer", must attendance and medicine be furnished for the above paltry sum. The Irish revenue police, which were recently disembodied, paid 11*d.* monthly each man; and civil practitioners who have charge of military detachments of less than fifty men are allowed 8*d.* a month, with a like sum in addition for each woman and child. Although the Irish constabulary surgeons apparently receive less a week than the English militia surgeons, it would, perhaps, be scarcely fair to compare the two cases, as the gentlemen of the latter class are specially injured by being obliged to relinquish their private practice. Still the case of our Irish brethren is one of great hardship, and with the other notorious instances of the same class, calls for redress. The subject of remuneration of the medical servants of the state is one which will, it is to be hoped, engage the attention of the new ministry.

We did not know that the ordering of a mutton chop now and then by a workhouse physician or surgeon was a crime of such awful magnitude, as some worthy gentlemen in the Emerald Isle seem to think it. The following are portions of a dialogue which took place on February 18th in the board-room of the Cork Union. The principal *dramatis personæ* were Mr. Jameson, a guardian, and Dr. W. C. Townsend, Assistant-Physician to the workhouse:

"Mr. Jameson wished for some information about a requisition for a pound of mutton chop which had been ordered for a patient in the hospital by Dr. Townsend. Such a thing had never been ordered before. More wine was ordered now by the doctors than for some years past, and what porter they ordered was given; but he did not like the idea now of giving mutton chops. If one man got mutton chops, others should get them also; and it would go on until, in the end, they would be getting chickens and eggs.

"Dr. Townsend. Indeed, Mr. Chairman, I didn't think that Mr. Jameson, or any other member of the Board, would send for me for such a thing as that. If Mr. Jameson or any guardian saw the poor man I ordered that mutton chop for—a man who is dying with cancer in the stomach, and has not retained anything on his stomach for the last five or six weeks—I think he would form a different opinion. . . . . I have only to tell Mr. Jameson and the other members of this Board, with the greatest respect for them, that whenever I see occasion for it, whatever a person in such a case really wants or ought to get, I will order.

"Mr. Jameson. I would sooner pay for a mutton chop out of my own pocket than establish such a precedent here. Dr. O'Connor never ordered mutton chops, so he must have been a very inhumane man, which I don't believe he was.

"Mr. O'Brien (Poor-law Inspector). I am sure Dr. Townsend never ordered anything that he did not find necessary; and when he finds a thing is necessary, it is his duty to order it."

Dr. Townsend, of course, only did his duty, both in ordering the meat, and in defending the course he had taken; but the pluck which he exhibited is worthy of commendation; and it sets off excellently the horror of Mr. Jameson. Horrible state of affairs, indeed! Workhouse doctors ordering more wine than in past years; and now mutton chops—and soon chickens and eggs too—for *paupers!*

Association Intelligence.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: GENERAL MEETING.

A general meeting of this Branch was held at the Hen and Chickens Hotel, Birmingham, on Thursday, Feb. 11th, 1858: Edwin Bartleet, Esq., President, in the chair. There were also present: A. Allcock, Esq. (Smethwick); G. J. Brown, Esq. (Birmingham); E. Chesshire, Esq. (Birmingham); J. Clay, Esq. (Birmingham); J. S. Gaunt, Esq. (Alvechurch); J. J. Hadley, Esq. (Birmingham); H. Hancox, M.D. (Wolverhampton); W. Hoare, Esq. (Birmingham); W. Hopkins, Esq. (Handsworth); W. E. Johnson, Esq. (Dudley); J. W. Keyworth, M.D. (Birmingham); W. J. Kite, Esq. (West Bromwich); G. H. Marshall, M.D. (Birmingham); J. B. Melson, M.D. (Birmingham); O. Pemberton, Esq. (Birmingham); J. Postgate, Esq. (Birmingham); J. Russell, M.D. (Birmingham); J. V. Solomon, Esq. (Birmingham); W. F. Wade, M.B. (Birmingham); C. Warden, M.D. (Birmingham); J. Wheatcroft, Esq. (Cannock); T. W. Williams, Esq. (Birmingham); G. Yates, Esq. (Birmingham); and as visitors, Messrs. T. Howkins and O. W. Barratt of Birmingham.

LAWS OF THE BRANCH.

Alterations in, and additions to, the laws of the Branch (the latter providing for filling up vacancies, number of meetings, and the admission of medical friends), of which due notice was given at the last general meeting, were proposed by the President, and seconded by W. Eagles Johnson, Esq., and carried unanimously.

NEW MEMBER OF COUNCIL.

The vacancy, occasioned in the Council by the death of Mr. J. Davies of Dudley Port, was filled by the election of Mr. C. T. Male of West Bromwich.

CASES AND COMMUNICATIONS.

The following papers were read:

1. Spasmodic Croup, as observed in six out of eleven Children of the same Family: fatal in two. By James Russell, M.D.
2. Cutaneous and some other (non-traumatic) Hæmorrhages. By J. W. Keyworth, M.D.
3. Cases of Uterine Hæmorrhage treated by Transfusion. By J. Wheatcroft, Esq.

[These papers, with the discussions thereon, will appear under the head of Transactions of the Branches.]

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.
2. Payment to the Secretary of the Branch to which the member belongs.
3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, February 1858.

Reports of Societies.

HARVEIAN SOCIETY OF LONDON.

Thursday, February 4th, 1858.

G. Hamilton Roe, M.D., President, in the Chair.

The President, upon taking the Chair for the first time, thanked the Society for the honourable position in which he was placed. He spoke of the increasing importance of the Society, and of the practical value of the papers read, as well as of the discussions which followed; and urged in the latter a rigid adherence to the particular subject before the meeting.

DIPHTHERITIS. BY H. W. FULLER, M.D.

Dr. Fuller exhibited a fibrinous cast of the pharynx ejected by a patient suffering from diphtheritis. It was above four inches in length, tubular in form, and remarkably firm in texture. The patient, a child, aged 11 years, was attacked with sore throat and fever on the 12th of last December. On the following day, the fever and sore throat had increased, and were accompanied by excessive dyspnœa and inability to swallow. Mr. Meehan, of Taunton Place, was sent for, and found the tonsils and the whole of the pharynx covered with a thick cream-coloured exudation, the skin of the entire body being red with a rash resembling scarlatina. The throat was cauterised with solid caustic, and other remedies were adopted; but without relief. On the morning of December 14th, the child was absolutely struggling for breath, when suddenly she ejected the fibrinous cast laid before the Society. From that moment recovery commenced; before evening, the fever and rash had disappeared, and she was breathing tranquilly. Aphthous ulceration of the mouth continued for two or three days longer; but before the expiration of a week from the date of her seizure, she was up and dressed, and perfectly well.

Dr. Headlam Greenhow related a case of diphtherite, which he believed to be of similar character to the disease described by Bretonneau, of Tours, and identical with the malignant sore throat which has recently prevailed in Essex and other parts of this country. A child, aged 8 years, after slight catarrhal symptoms, complained of sore throat without much fever, and unattended by any form of exanthem. The throat was swelled externally; but the child continued to play and sit up as usual until the evening before its death. At the end of four or five days there was difficulty of breathing; and then only the child came under treatment. The breathing was slightly stridulous, and the child complained of sore throat, but the external swelling had almost subsided. Internally, the fauces and throat were coated with what appeared to be an ash-coloured exudation. The little patient became suddenly worse during the night, and speedily died.

On examination after death, the pharynx and tonsils were found to be covered with a loose friable granular exudation. The membrane below the exudation was unhealthy and aphthous, especially on and near the tonsils. This form of exudation only extended to the *rima glottidis;* but the larynx and first inch and a half of the trachea were lined with a tube of croupy false membrane, which, already partially detached, adhered to the subjacent membrane by only a few points, which presented bloody specks when the false membrane was removed. With this exception, the mucous membrane underneath appeared almost healthy, and presented but very little vascularity. A small detached portion of the false membrane and a pellet of the granular exudation were lodged in the *rima glottidis*, and may perhaps have accelerated the fatal termination of the case. The remainder of the trachea was healthy.

ON SOME FORMS OF IMPAIRED VISION, AND ON THE USE OF THE OPHTHALMOSCOPE. BY HAYNES WALTON, ESQ.

The author commenced by showing that almost every state of impaired vision, not accompanied with palpable objective symptoms, was, at a time not long past, attributed to amaurosis—a term which, it was much to be regretted, was even now too uncertainly and too generally applied, even if we include within the definition affections of the visual nervous apparatus in all their forms and degrees. More recently, it had been supposed that an unhealthy choroid coat produced many of the symptoms formerly thought to proceed from deterioration of the nervous apparatus; and "choroiditis" became a fashionable disease. The greater portion of cases of defective sight was by some practitioners yet put down to choroiditis. If the eyes were fatigued, as the brain might be, or the arms, or the legs, from over-work, choroiditis was the malady. The chief purport of the paper was to show that, by the rapid strides made in ophthalmology, and by the improvement in our diagnosis, much of the obscurity, confusion, and error, which formerly prevailed respecting impaired sight, had been removed; and that, necessarily, our therapeutics had also progressed.

Among the latest and most important discoveries was that which teaches that asthenopia, or incapability of sustaining the eye in a state of adjustment to near objects, was a distinct, well marked, and not uncommon affection. The discovery, due to Dr. Mackenzie, greatly reduced the catalogue of retinal and choroidal affections. Asthenopia, or weak-sightedness, was very common. Mr. Walton hardly ever attended at the Ophthalmic Hospital, on full days, without seeing an example. He met with it often in private practice. These were the chief characters of the affection. In the first instance, fatigue of vision was complained of after employment of the eyes on any of the accustomed pursuits. This might occur soon, even when such employment had been in moderation: for instance, when it partook of the nature of amusement, as fancy work and light reading, although, unquestionably, the disease was more often seen when the eyes had been hard pressed, as in trades requiring minute and long continued exercise of vision. Afterwards, confusion and obscurity prevailed, sometimes attended with heaviness in the head, or actual headache. If the occupation were that of needlework, the stitches could no longer be seen; if it were reading, the lines seemed to run into each other, and then complete indistinctness ensued. A momentary remission, either by looking at distant objects or shutting the eyes, afforded temporary relief, and the objects again became distinct. The time at which these symptoms supervened, after the eyes were employed, varied much, from a few minutes to an hour or more; and this was not always in a ratio with the duration of the affection. The rest of a day or two was always attended with much benefit: indeed, Mr. Walton had not met with an exception to any artisan not always finding his eyes far stronger on the Monday, if the Sunday had been made a day of repose. On the other hand, the injurious effects of prolonged occupation had always been evinced in the greater aggravation of the symptoms on the Saturday. But many persons were wholly unable to work for six days; and some, with all their efforts, and regular stages of rest for a few months at a time, could not continue even for a day. There were not in general objective symptoms—no redness of eye, no abnormal state of pupil, nor any external evidence of a morbid state. There was not necessarily any intolerance of light; but the author was sure that, in the large majority of cases, a bright day was rather disagreeable; bright artificial light was trying, and sometimes the intolerance was very marked. As a rule, there was no evidence of derangement of the functions of the body; but general feebleness was most commonly present; and the persons in humble life most subject to asthenopia were especially girls who were thin, ill fed, and who led sedentary lives; tailors; compositors; and writing clerks of all kinds, especially those employed in lawyers' offices.

Asthenopia was undoubtedly, in the main, loss of focal adjustment, or debility of the apparatus by which the eye is adjusted for the vision of near objects; but it was something more. The views of Dr. Mackenzie, as expressed in the *Edinburgh Medical and Surgical Journal*, No clvi, were to the effect that the retina was partly involved; but that there was no considerable change of structure in it; no atrophy was manifested, from the fact that the power of vision was not permanently impaired. The minutest objects were seen, for a time, as clearly as in the natural state of the eye. That the sole, or even the chief seat of asthenopia, was the retina, was improbable; that it was in part the seat of it, was scarcely to be doubted.

In the incipient state, general treatment, with rest of the eyes, was often very beneficial; the tonic plan was nearly always indicated. By this, Mr. Walton means not only tonic medicines, but the use of the cold bath, and especially cold sea bathing, and the employment of the eye-douche. Another important curative means was the exercise of the eyes on distant objects—a condition that cannot be well fulfilled in large towns,—together with bodily exercise in the open air. Well marked cases of asthenopia were seldom cured. The recovery consequent on rest remained so long only as the close application of the eyes to their accustomed work was discontinued; and therefore, whenever possible, it would be well at once, especially in early life, for that trade or employment on which the eye

quickly tired to be changed for some means of livelihood not requiring such exercise of sight. Later in life this was more difficult to be effected; and when the avocation could not be changed, the eyes must be used as little as possible by artificial light, and a system established of working by stages. For instance, a person should discontinue work at a time short of that at which the sight begins to be disturbed, and rest for a minute or two, or longer, according to the effect produced, and, if necessary, allow a very long period of repose; and it might be requisite, even with this, to work only on alternate days. Although the affection should grow worse, it did not end in blindness. Persons with asthenopia were very apt to make themselves worse by using convex glasses. Sometimes these were beneficial; but certainly not generally.

It could only be in the early stage that amaurosis, or loss of visual power from some defect in the brain, optic nerve, or retina, could be mistaken for asthenopia. When the nervous apparatus only was at fault, there was an existing imperfection of sight, extending to all bodies, whether minute, near, or distant; and usually the power of seeing improves a little after the eye had dwelt on an object. In asthenopia, the sight became dim only after looking at near things for a time, varying from a few minutes to hours.

Mr. Walton was not willing to admit the existence of choroiditis as a distinct affection. He had never been able to arrive at any means of determining its presence; and the general phenomena of disease at the posterior part of the eye induced him to believe that the choroid could not be inflamed independently of the retina, or the retina independently of the choroid, or without other tissues of the eye participating in the attack. Different writers ascribed the same symptoms to choroiditis, choroido-iritis, retinitis, and sclerotico-choroiditis. The ophthalmoscope had wonderfully changed and improved our existing ideas of the pathology of the retina and the choroid. Adhesions of the iris to the lens, and opacity of the lens, necessarily limited or prevented its adaptation. The advantages of the ophthalmoscope could not be over-estimated. It was to the ophthalmic surgeon what the microscope was to the pathologist, and organic chemistry to the modern physician. If cataract be put out of consideration, we must, in nearly all instances of marked impairment of vision, seek the malady in the interior of the eye; yet till lately, when a patient presented himself with loss of sight, if we found the iris more or less active, the pupil clean, and no external mark of preternatural vascularity, we could not get even an approximative diagnosis, except there were such cerebral or general symptoms as at once pointed to the nervous system. But we could now examine the interior of the eye as certainly as its surface. Most commonly changes were detected that accounted for the subjective symptoms. Some of these alterations could readily be associated with the symptoms as cause and effect; but some could not, and the work yet before the ophthalmologist was to trace these diseased conditions to their several origins. The particulars of several cases were read to illustrate the usefulness of the instrument. Afterwards two patients were exhibited to demonstrate the practical application of this appliance.

Mr. Ernest Hart agreed with Mr. Walton that asthenopia or weaksightedness was not due to inflammation, and that the disease had been always best treated by tonics. Dr. Mackenzie considered that asthenopia was a weakness of the muscular tissue. It might be so; or more probably of the nerve-tissue. Choroiditis was not to be looked upon as a too great refinement of diagnosis. The most hopeful results would accrue from the use of the ophthalmoscope.

Dr. Fuller asked if any particular tonic was indicated in the treatment of the disease. He had found the internal use of strychnine very effectual.

Dr. Handfield Jones had employed strychnine in two cases with good results; in one, it was applied locally.

Mr. Ballard had a patient, the mother of many children, who, whilst suckling, was seized with marble blindness, accompanied with severe pain in the forehead. The application of a few leeches aggravated the complaint. He then gave tonics and stimulants; and she soon recovered.

Dr. Hart Vinen had seen a case of marble blindness accompanying a case of uterine hydatids lasting two years. The hydatids having been removed, the sight returned.

Dr. Goolden referred to two cases of blindness in railway guards. Bleeding was resorted to in the first case; the patient remained blind. The other was bled, and had mercury; he then saw objects, but without colour; and ultimately recovered his sight completely.

Editor's Letter Box.

IS ARSENIC-EATING PROPHYLACTIC AGAINST THE EFFECTS OF BITES OF VENOMOUS REPTILES?

Letter from W. B. Kesteven, Esq.

Sir,—Much as I may hope that the defensive property of arsenic, in snake-bites, may be established, I trust that Mr. Braid will pardon my demurring to this inference, as deduced by him from Dr. Honigberger's narrative.

Solely with the desire to elicit truth, I must ask permission of Mr. Braid to receive, with entire distrust, the story of the arsenic-eater, quoted as the basis of his reasoning, and which, I observe, is not given as the result of Dr. Honigberger's own inquiry, but simply on the faith of a faqueer. I ask for something stronger than this in support of so remarkable a statement. I would also ask Mr. Braid upon what he grounds his belief in arsenic-eating?

Having taken some trouble to ascertain the credibility of the story of the arsenic-eaters of Styria, and having found it totally wanting in proof, I may be excused if I hesitate to believe the same romance, albeit the scene be changed to Hindostan in place of Austria. Dr. Honigberger's narrative is characterised by the easy reception, as facts, of purely hearsay statements, such as I found to constitute all the accounts that I have been able to trace from their original German sources. (See Association Medical Journal, August and September 1856.)

I take leave to doubt that the faqueer, mentioned by Dr. Honigberger, "really possessed the secret of preventing his blood being affected by the bite of venomous reptiles"; for in the very narrative cited it is to be observed that this same faqueer suffered the alarming consequences of a snake-bite—very narrowly escaping with his life. That on other occasions he is said to have been bitten with impunity, may be explicable on more transparent assumptions than that he could with impunity eat a deadly poison. We know that snakes vary in character—some being harmless, others venomous. The varieties of snakes, however, are not more numerous, nor are the changes in the hues of their skins more subtle, than are the resources of craft and deception on the part of Indian jugglers and snake-charmers. It is too much to be required to lose sight entirely of the verified observations of science, and instead thereof to place implicit confidence in the unsupported assertions of one of a people, concerning whom it has been said by a writer acquainted with them, and whose opinion has been borne out by recent events, that—"What the horns are to the buffalo; what the paw is to the tiger; what the sting is to the bee; what beauty, according to the old Greek song, is to woman, deceit is to the Bengalee. Large promises, smooth excuses, elaborate tissues of circumstantial falsehood, chicanery, perjury, forgery, are the weapons offensive and defensive." (Macaulay). Room for suspicion that this faqueer may have been bitten at other times by harmless serpents, is afforded by the fact, also stated in this narrative, that the aforesaid alarming symptoms occurred while he was under the eye of Dr. Honigberger; and when, it may be fairly suspected, that choice of the particular reptile was not open to him.

The alleged protective power of arsenic-eating is moreover put forward, in this instance, under the rather suspicious circumstance of bolstering up this failure of his boasted power to resist the effects of snake-bites. The want of this power in one, said to be so protected, is but clumsily accounted for by the pretence that the faqueer could not procure the arsenic while under the control of Dr. Honigberger. This, it may be noted, is inconsistent with what is usually given as a prominent *fact* in arsenic-eating; viz., that to discontinue the practice is certain death.

I have not raised these objections to Dr. Honigberger's narrative, or to Mr. Braid's inferences, out of a spirit of captiousness. Mere facility of belief in such marvels would not have called for very strenuous efforts in its correction, were it not, as in this case, associated with dangerous deductions. The medico-legal bearings of the arsenic-eating story were only too strikingly illustrated in the trial of Miss Smith, at Glasgow, and in the Burdon poisoning case, with many others which might be collected. Doubtless there are yet to be added to the catalogue catastrophes not less grave. For this reason, then, I would entreat Mr. Braid and others to suspend their belief in statements so marvellous until they shall have satisfactory proof of their veracity. The proofs hitherto adduced

have failed to gain the credence of the most trustworthy toxicological authorities, either in this country or on the continent.

I am, etc.,
W. B. Kesteven.

Upper Holloway, Feb. 13th, 1858.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Bryden. On February 2nd, at Uffculme, Devon, the wife of *Richard Bryden, Esq., Surgeon, of a daughter.

Clark. On February 20th, at 23, Montague Place, the wife of Andrew Clark, M.D., of a son.

Jackson. On February 18th, at 21, Euston Road, the wife of *Thomas Carr Jackson, Esq., Surgeon, of a daughter.

Simpson. On February 21st, in Canonbury Street, Islington, the wife of Archibald Simpson, M.D., formerly of Alexandria, Egypt, and late Surgeon to the English Hospital, Jerusalem, of a son.

Warden. On February 18th, at Cherry Street, Birmingham, the wife of *Charles Warden, M.D., of a daughter.

MARRIAGES.

Boyes—Champion. Boyes, Charles Robert, M.D., Deputy Inspector-General Army Medical Staff, to Margaret Mary, daughter of the late Major Champion, 21st Royal North British Fusiliers, at Edinburgh, on February 16th.

Fitz-Gerald—Hele. Fitz-Gerald, Charles Egerton, Esq., Surgeon, of Folkestone, to Juliana, eldest daughter of J. Carroll Hele, Esq., of Shaldon St. Nicholas, Devon, at Ringmore, on February 18th.

Riley—Rémond. Riley, James, Esq., Surgeon, of St. George's Road, Belgravia, to Juliette Amelia, eldest daughter of A. F. Rémond, Esq., of Paris, at the english Embassy, Paris, on February 18th.

DEATHS.

Blakiston. On February 23rd, at St. Leonard's-on-the-Sea, aged 55, Frances, wife of Peyton Blakiston, M.D., F.R.S.

Chatterley, William M. F., Esq., Surgeon, late of Brompton, at Port Adelaide, suddenly.

Dalton, Joseph, Esq., Surgeon, at 13, Mecklenburgh Square, on February 20th.

Haliday. On February 20th, at Ostend, suddenly, Alicia, wife of H. Haliday, M.D., of Dublin.

APPOINTMENTS.

*Warden, Charles, M.D., appointed Surgeon to the Birmingham General Dispensary.

HEALTH OF LONDON:—WEEK ENDING FEBRUARY 20th, 1858.

[From the Registrar-General's Report.]

The deaths registered in London, which in the previous week were 1195, rose in the week that ended last Saturday (Feb. 20th) to 1275. In the ten years 1848-57 the average number of deaths in the weeks corresponding with last week was 1164; but, as the deaths of last week occurred in an increased population, they should be compared with the average when the latter has been raised in proportion to the increase, a correction which will give 1280. The number of deaths actually returned agrees very closely with the number obtained by calculation.

By comparing the results of the last two weeks, it will be seen that the deaths caused by zymotic diseases were successively 241 and 230, the corrected average for last week being 282; those caused by "constitutional" diseases rose from 208 to 257, the corrected average being 255; those from "local" diseases rose from 533 to 607, the average being 539; the deaths from "developmental" diseases were respectively 145 and 141, the average being 146; and "violent" deaths were 45 and 25 in the two weeks, the average being 33. Hence it appears that the mortality from zymotic diseases has been nearly stationary during the fortnight, and that the same remark holds with regard to those of the developmental class. The increase under two other heads arises from phthisis, which rose in the two weeks from 130 to 158; from convulsions, which rose from 34 to 43; from disease of the brain, which rose from 8 to 19; and from disease of the heart, which rose from 39 to 53. The continuance of cold weather does not appear to have raised the mortality of bronchial disease within the period referred to, for though the mean temperature of the last fortnight was only 34°, or about 4° below the average, bronchitis was fatal in the two weeks in 193 and 191 cases; pneumonia in 104 and 102. But the mortality of bronchitis is considerably greater than is usual at this time, for if the deaths did not exceed the average of corresponding weeks, they would not be more than 137. The three oldest persons returned were, two women 90 years of age, and a man 91.

The deaths from measles declined from 57 to 34. Hooping-cough has carried off rather more than 50 children in each of the last five weeks. Last week 39 deaths were referred to scarlatina, and chiefly included under this head is an unusual number of cases in which the disease is returned as "diphtheria". These last amount to 15, and are given in detail in the notes. Four persons, of whom one was a man, aged 46 years, died of measles between the 8th and 11th instant inclusive, in the St. Pancras Workhouse.

Last week, the births of 1021 boys and 942 girls, in all 1963 children, were registered in London. In the ten corresponding weeks of the years 1848-57, the average number was 1593.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·872 in. On Wednesday and Thursday the mean reading was above 30 in. The highest reading in the week occurred on the former day, and was 30·04 in. The mean temperature of the week was 34°, which is 4·2° below the average of the same week in forty-three years (as determined by Mr. Glaisher). The mean daily temperature was below the average throughout the week, and on the last three days the extent of depression was 7° or more. The highest point attained by the thermometer in the shade was 47° on Tuesday; the lowest was 24° on Friday. The mean daily range of temperature in the week was 12·7°; on Wednesday the range was 18·1°. The difference between the mean dew-point temperature and air temperature was 4·1°. The mean temperature of the water of the Thames was 38·9°. The mean degree of humidity of the air was 84. The wind blew from a north-easterly point during the first half of the week, and thereafter from the south-east. The rain-fall measured was 0·97 in., nearly all of which occurred on Sunday.

Western Dispensary for Diseases of the Skin. The Sixth Annual Court of Governors of this Charity was held at the Dispensary, Charlotte Street, Fitzroy Square, on Monday, February 15th, the Rev. Canon Dale in the Chair. The Report of the Committee stated that there had been 9,317 applications for relief during the past year, being an increase of 1,177 on the previous year; and that the subscriptions had increased, but not in the same ratio. The practice of the Dispensary had been open to the profession; and several gentlemen of high professional position, as well as students from several Hospitals, had occasionally attended. Thanks were accorded to the Committee, to the Officers, and to the Chairman; and especially to Mr. Hunt, the surgeon to the Dispensary, for the skill and industry shewn in raising it to its present useful and promising position.

Royal London Ophthalmic Hospital. The Annual meeting of the Governors of this Charity was held at the Hospital on February 23rd, Mr. Labouchere, the Treasurer and Vice-President, in the Chair. A tribute of respect was paid to the memory of their late President, the Earl Fitzwilliam. William Cotton, Esq., D.C.L., was chosen as the new President. The Bishop of London, Sir Charles Rugge Price, Bart., J. G. Barclay, G. H. Barnett, and G. H. Foster, Esqs., were chosen Vice-Presidents. The Report stated that 12,577 patients had been admitted during the past year, and that such was the pressure upon the Committee for more wards for in-patients, they intend, when the funds will permit, to build a new wing, in addition to the extensive accommodation for out-patients already recently effected. It appears, notwithstanding the increase of its supports, that the expenditure had exceeded the income nearly £1,200. Thanks were voted to the medical staff, and to several gentlemen who had made valuable contributions to the library. The usual resolutions having been agreed to, the meeting separated.

THE EXCHANGE OF DEAD BODIES IN THE NEWINGTON WORKHOUSE: TRIAL OF THE MASTER.

Central Criminal Court, Feb. 24th. *Old Court.* (Before Mr. Justice Wightman and Mr. Justice Crompton.)

Alfred Feist, late master of the Newington Workhouse, surrendered to take his trial upon a charge of misdemeanour.

Mr. Robinson conducted the prosecution; Mr. Matthews appeared for the defendant.

The counsel for the prosecution said that, although the indictment, he believed, contained sixty-four counts, it appeared that the real question to be decided was in a very narrow compass. The substantial charge against the defendant would be, that he, holding the position of master of the Newington Workhouse, and it being part of his duty, in that capacity, to superintend the burial of the paupers who died in that establishment, neglected that duty, and disposed of the bodies of such persons for the purpose of being dissected, for his own profit and advantage. He believed it would be made to appear that none of the bodies disposed of by the defendant could legally have been so disposed of, and it appeared that the remains of one dissected body were substituted for a body that was supposed to be about to be interred, and the latter was then sent to be dissected, and afterwards made use of in the same manner; so that mourners, instead of following the remains of their own relations to the grave, followed those of some other person. It had been laid down that any dealing with a dead body, other than to decently inter it, was an offence at common law; but it appeared to the learned counsel that the case would clearly come within one of the sections of the Anatomy Act, which declared it to be an offence for any person to dispose of a dead body for the purposes of dissection where the party during life, or where the husband or wife, or any known relative of the deceased had objected; and this section also enacted that no undertaker or person entrusted with the duty of burying the deceased should, under any circumstances, have the power to dispose of it for the purposes of dissection; and also that it should not be done in any case where the relatives of the deceased required the body to be buried without being dissected; and this section at the same time required that there should be certain certificates obtained, and other formalities gone through, as an additional protection against the possibility of dead bodies being improperly used for dissection. He was bound to admit that the defendant had complied with all the forms required by the statute; but the charge against him was that he had fraudulently obtained possession of the remains of a great number of deceased persons, and had disposed of them for the purposes of dissection for his own advantage and profit. He said that the case would no doubt depend a good deal upon the evidence of a witness named Hogg, who was the undertaker, and who, no doubt, stood to some extent in the position of an accomplice.

In support of the charge, the evidence of Mr. Hogg and several other witnesses was adduced, as well as a statement made by the defendant on being examined by one of the Poor-law Inspectors in November 1857. This statement was to the effect that there had been a good many deaths in the poor-house during the period that the defendant had been master, and that he kept one key of the dead-house, and the porter another. He admitted that he forwarded the bodies of a good many of the paupers to the hospital for the purpose of dissection, but said that he had in every case complied with the requirements of the act of Parliament. He admitted that the bodies of persons named Mary Whitehead, Charles Greenland, Phœbe Clark, Thompson, and five others, whose cases were the subject of the present indictment, were all sent to be dissected; but the relatives had made no objection, and he was not aware of any instance in which a "claimed" body had been sent for dissection. The defendant also stated that he had never received any gratuity from Mr. Hogg, the undertaker, but he admitted that the secretary to Guy's Hospital had paid him on two occasions the sums of £10 and £20. These sums did not refer to any particular number of bodies that he had been the means of supplying to the hospital, but were given as a gratuity. The defendant also stated that it was no part of his duty to be present when the bodies of paupers were screwed down, and that this was the duty of the undertaker, and he stated that he always understood that Hogg was not to charge the parish for the burial of the bodies that were sent for dissection.

Mr. Mark Shaddock, treasurer to Guy's Hospital, proved that he had from time to time paid the defendant money. In 1856 he paid him £19:10, and in 1857 £27. The money was given to him as a gratuity for the trouble he had in obtaining the necessary certificates relating to the bodies that were sent to the hospital for dissection. He was aware that the defendant was the master of a workhouse; but he was not aware that it was an offence against the statute to make such a payment. It had been the invariable practice to make these payments, to his knowledge, since the year 1849.

The case for the prosecution having been closed,

Mr. Matthews said that the defendant had the legal custody of the dead bodies of the paupers, and he had the power to dispose of them, and he had complied with every one of the requirements of the Act of Parliament before the bodies were sent to the hospital; and, there being no evidence that the relatives of the deceased required that they should be buried, he submitted that the defendant was justified in what he had done.

Mr. Justice Wightman said, that the first four counts, which charged that the defendant, as master of the workhouse, had these bodies entrusted to his charge for the purpose of burial, and not otherwise, clearly had not been supported; as he was of opinion that the defendant had the legal custody of the bodies, and had the power of dealing with them according to the Anatomy Act.

Mr. Matthews contended that the facts had not established any offence at common law, and that there was no evidence to show that the bodies had been disposed of, or sold, for the profit of the defendant; and that there was also no evidence that the relatives required the bodies to be buried, which was absolutely essential to be proved under the provisions of the Anatomy Act.

Mr. Robinson, in reply, urged that there was ample evidence that what was done by the defendant was for lucre and gain; and, with regard to the point, that the relatives had not required the bodies to be buried, he said that the deception that was practised upon them by a day being appointed for the funeral, and seeing the bodies in the coffins ready apparently for interment, effectually prevented them from making a distinct request that the burial should take place. It was clearly, however, their intention that their relatives should be buried.

Mr. Justice Wightman, after some further discussion, said the questions he should reserve for the consideration of the jury were whether the defendant had disposed of these dead bodies for his own profit, and whether there had been any act on the part of the relatives that amounted to a request that the bodies should be buried.

Mr. Matthews addressed the jury for the defendant, and urged that the defendant had done no more than he was legally justified in doing under that act of Parliament, and he said that if there had been any irregularity the witness Hogg, who had been introduced on the part of the prosecution as an accomplice, was much more likely to have been guilty of it than the defendant. He reminded the jury that Hogg had in the first instance refused to answer any questions until an assurance was given to him that he should not be prosecuted, and that he had a direct inducement to substitute one body for another in the fact that he received 3*l.* 10*s.* for the burial of every body that was taken to the hospital, while he only received 5*s.* 6*d.* for the ordinary parish funeral.

Several highly respectable witnesses were called, who gave the defendant a most excellent character.

Mr. Justice Wightman, having intimated his intention to reserve some of the legal points that had been raised on behalf of the defendant for further consideration, said that it appeared to him that the substantial questions to be considered were, whether the defendant had delayed the burial of these bodies in order that they might be used for the purpose of dissection, and whether he intended to make a profit to himself in so doing; and also whether the relatives of the deceased had intimated a request that the bodies should be interred, and that they should not be subjected to anatomical examination, or whether they were prevented from doing so by the proceedings taken by the defendant to get up a pretended funeral. His lordship handed the written questions to the jury, requesting that they would answer each separately.

The Jury retired, and in about half an hour they returned into court, and expressed their opinion with regard to all the questions in the affirmative.

The learned Judge upon this finding, directed a verdict of *Guilty* to be recorded upon the fifth, sixth, and seventh counts of the indictment.

The Jury said they were anxious to express their regret that,

owing to the promise made by the guardians, the man Hogg had not been placed in the dock with the defendant.

A verdict of Guilty was then recorded, but no sentence was passed, and the defendant was allowed to be at large upon his procuring sureties to appear and receive judgment in case the points of law that are reserved should be decided against him.

Clerical Support of Quackery. The *North American Medico-Chirurgical Review* for January 1858, contains an excellent article on Quack Advertisements in Religious Newspapers. It is too long to be transferred entire to our pages; but an extract or two will show some of the absurdities practised in the way of testimonials by some of the American clergy. We wish we were sure they had no parallel on this side of the Atlantic.

"On taking up a quack's 'almanac', we see in the titles of some of his compounds a show of their adaptation to particular classes of diseases; but the temptation cannot in any instance be resisted of claiming for the compound a curative power over all the diseases of an organ or apparatus, whether they be acute or chronic, nervous or inflammatory, hæmorrhagic or tuberculous, or whether located in tissues quite different from each other in their structure and vital properties. An expectorant, for example, is formally announced as the remedy in asthma, not only to excite the mucous membrane of the lungs to relieve itself by expectoration, but also, and with equal confidence, in hæmorrhage from the lungs, in which we are desirous of keeping this organ as quiet as possible, and of preventing any excitement and movement such as are desirable to produce expectoration. As might have been anticipated, we find certificates of clergymen in favour of the 'expectorant', which is announced as a wonderfully curative agent in asthma, cough, and influenza. We are not told whether subsequent attacks of the first-mentioned disease—the most formidable of the three—were prevented by this nostrum. For the relief of the fit or paroxysm, there are scores of remedies, each one of which might claim certificates of its curative powers over a stage of the disease that would have passed away without the use of any remedy at all. Under such circumstances, the one last taken will have the credit of the cure, we ought rather to say of a solution of the fit of asthma.

"But commend us to the out and out spoken praises lavished by another reverend; first, on the 'expectorant', for its having been the means, 'under God', of keeping him from his grave; ditto on the 'alterative', for his wife; then on the 'carminative balsam', for taking him, who laid as cold as a corpse, out of the jaws of cholera. Next are mentioned 'the sanative pills', which 'work to a charm'; but whether on the bowels or the brain—to carry off redundant bile, or to relieve from thick coming fancies—we are not told. The most wonderful wonder, to use the words of the itinerant showman, yet remains in the shape of the 'vermifuge', which is the best thing the reverend brother ever found among children for the cure of—worms? no, nothing of the sort—it was 'for chills and fever'. This feat of killing an object not aimed at, beats even the engineering skill of the famous Todleben in Sebastopol; and can only find a parallel in the annals of cockney sporting. The zealous certifier tells his quack friend of his having 'had formerly some practice in medicine, but abandoned it to become a —— preacher.' It is devoutly to be hoped that his theology rests on a more orthodox foundation than his pathology, and that his preaching is more successful than his physicking; for otherwise his flock cannot be said to feed on pastures green, nor to be safe against wolves leaping into the fold.

"Jealous, perhaps, of the reputation which might accrue to the —— church by some of its members being such successful media for the introduction and working of the 'expectorant', the 'carminative balsam', the 'sanative pills', and the 'vermifuge', out comes a brother, of another sect, whose rapid cure shows his transmissive power of the 'alterative', for that was the article employed in his case, to go far beyond that of his reverend rival of the other denomination. We learn from his certificate that he was seized in the night, with what he afterwards learned was 'malignant erysipelas', from which he suffered terribly the next day; but we must give the description of the case in his own words:—

"'I had retired to bed about eleven o'clock in good health, and fell asleep, but was soon awakened by extreme pain in one hand and arm. I succeeded in keeping my bed until about four o'clock. When I arose, I found my head badly swollen and in a high state of inflammation. A small black spot on the back of my hand, about the size of a five-cent piece, soon rotted and came out to the bone. When I arose, the pain was very severe, running into my head, and even the whole system. By twelve o'clock, my head and face were badly swollen. The glands of my throat swelled very much, and by this time every tooth in my head was more or less loose; two-thirds of the skin of my mouth and lips peeled off; my sight quite affected; no physician near. I solicited my friends to take me home (fifteen miles), but they were fearful I could not stand it, when T. R. Davenport, who kept the public-house, requested me to go to his house. Chills, faintness, and sickness, were constantly increasing upon me. I had become almost insensible.' Relief soon came in the shape of the 'alterative', administered by a kind old lady, who met the patient at the store. The dose was a spoonful (tea or table, not specified), 'and repeated two or three times in the course of an hour, in which time the faintness, sickness, and chills, had principally left, a free perspiration was on the surface, and the inflammation fast abating. The third day after, I was able to ride home. Dr. Plimpton informed me that the attack was one of the severest kind of *malignant erysipelas*, and that the use of your alterative was the means of saving my life.' The grateful certifier ought to have made the whole story complete, by expressing his belief that he was a subject of so extraordinarily violent a case of malignant disease, in order to show the still more extraordinarily curative powers of the nostrum used by him on the occasion. We would not treat with levity any form of suffering; but we have shrewd suspicions that the editor and proprietor of the quack almanac has been hoaxed by some wag's describing as a case of malignant erysipelas in a —— preacher, the effects of a 'free fight', in which some unfortunate wight had been engaged, and was 'punished' by a big-fisted antagonist. Of one thing we are sure, that, if such a narrative had been written by a medical man, we should have no hesitation in taxing him with having most extravagantly drawn on his imagination.

"We would respectfully suggest the propriety of the different Christian churches of the land taking order on this subject, and of their laying down the forms of dealing, as the Friends call it, with delinquents, whose conduct perils the dignity, purity, and usefulness, of the different religious denominations to which they severally belong. The task would not be at all a difficult one; as, happily, the great body of the clergy, and especially the members of it most conspicuous for their piety, learning, and consistent walk, are, we believe, free from the taint of corruption in this matter; and they cannot but feel aggrieved at the sore not being cleansed."

American Contributions to the Jenner Monument Fund. It will be remembered by many of our readers that several years ago subscriptions were made in this country for the purpose of erecting a monument to Jenner, the illustrious discoverer of vaccination. The history of the accumulation of funds wherewith to defray the expenses of this merited tribute is interesting to us as Americans. When it was proposed in England to erect a monument to the memory of this distinguished physician and philanthropist, it was suggested that, as it might be an object of universal interest, the people of all nations would gladly contribute; aid was accordingly solicited from the United States, and the appeal was so much more cordially responded to in this country than in the one in which the movement originated, that it may be truly said that the Jenner Monument in London is essentially an American tribute, which the English people have assisted in paying to an English celebrity. Of the whole sum collected some time ago, *three hundred and forty pounds* were transmitted from America *—one hundred and twelve pounds* from the Philadelphia Committee; and in the country of his birth, but *one hundred and ninety-six pounds*, including *twenty-five pounds* from the Prince Consort. (*North American Medico-Chirurgical Review*, January 1858.)

TO CORRESPONDENTS.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from:—Mr. J. Dulvey; Dr. Mc William; Dr. F. J. Brown; Mr. Holmes Coote; Mr. J. A. Hingeston; Dr. Edward Smith; Dr. Routh; Dr. J. Sloane; Mr. T. Hunt; Dr. Markham; Mr. T. Holmes; Dr. Russell; Mr. Oliver Pemberton; Mr. J. V. Solomon; Dr. Septimus Gibbon; Dr. Warden; Dr. J. H. Lakin; Mr. C. R. Thompson; Dr. Torry; Dr. de Mierre; Mr. G. D. Hunt; Mr. Gordelier; Mr. R. Bryden; Dr. Bader; Mr. T. L. Pridham; Mr. Stone; Dr. Lancaster; Mr. T. A. Blomfield; Dr. G. Moore; and Dr. Budd.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. A Dictionary of Medical Science; containing a concise Explanation of the various Subjects and Terms of Anatomy, Physiology, Pathology, etc., with French and other Synonyms. By Robley Dunglison, M.D., LL.D. Revised and very greatly enlarged. London: Trübner & Co. 1858.
2. The Cause of the Coagulation of the Blood: being the Astley Cooper Prize Essay for 1856, with Additional Observations and Experiments: and with an Appendix, shewing the Bearings of the Subject on Practical Medicine and Pathology. By *Benjamin Ward Richardson, M.D. London: John Churchill. 1858.
3. On Dislocations and Fractures. By Joseph Maclise, Fellow of the Royal College of Surgeons. Fasciculus II. London: John Churchill. 1858.
4. A Practical Treatise on the Diseases of Infancy and Childhood. By T. H. Tanner, M.D., F.L.S. London: Henry Renshaw. 1858.
5. On some Modern Doctrines concerning Syphilis. By *Langston Parker, F.R.C.S. 1858.

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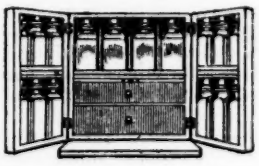

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